ektron

What do you want your website to do ?

Ektron CMS400.NET Administrator Manual

Version 7.6 Rev 12

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To learn what's new in this release, see

http://dev.ektron.com/cms400releasenotes.aspx

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Securing Ektron CMS400.NET

Security Checklist

The following is a checklist of things an Administrator must do to secure **Ektron CMS400.NET**.

Change the Admin and Builtin Users' Passwords

Make sure you change the password for the Admin and Builtin user. To change the Admin user's password, navigate to .

☐ Change Admin user password

Change the Admin user's password in the Workarea by following these steps.

1. In the Workarea, navigate to **Settings** > **Users**
2. Click the **Admin** user.
3. Click the **Edit Users** button.
4. In the Password and Confirm Password fields enter the new password.
5. Click the **Save** button.

☐ Change builtin user password

IMPORTANT! If you changed the builtin user password during the site setup, you do not need to change it again. See "Editing Builtin" on page viii for additional information.

Change the builtin user's password in the Workarea by following these steps.

1. In the Workarea, navigate to **Settings** > **Configurations** > **Setup**.

2. Click the **Edit** button.
3. Find the Built In User field.
4. In the Password and Confirm Password fields enter the new password.
5. Click the **Update** button.

Remove Sample Users and Sample Membership Users

Some sample users and sample membership users are included with CMS400.NET for evaluation and demonstration purposes. These users should be removed when they are no longer needed.

CMS users have access to the Workarea. They can be content authors, administrators or even developers who need access to information in the Workarea. These people count towards the number of users in your license.

Membership users are typically people who only interact with your Web site. Membership users are a category of users who have limited privileges to Ektron CMS400.NET. Unlike regular CMS users, they cannot use the Workarea and do not count towards the number of users in your license.

☐ Remove Sample Users and Sample Membership Users

IMPORTANT! Some users in this list might not appear in your User list. Also, you might have sample users that appear in your users lists. This depends on which version of the software you have installed.

CMS400.NET Users	Membership Users
☐ **jedit** ☐ **tbrown** ☐ **jsmith** ☐ **vs** *See Also:* "Managing Users & User Groups" on page 720	☐ **jmember** ☐ **member@example.com** ☐ **north** ☐ **supermember** ☐ **west** *See Also:* "Membership Users and Groups" on page 735

Removing CMS400.NET Users

To remove CMS400.NET users in the Workarea, follow these steps.

1. In the Workarea, navigate to **Settings** > **Users**.
2. Click the check box next each user you want to remove.
3. Click the Delete button ( ).
4. Click **OK** in the dialog box that appears.

The page refreshes and the users are removed.

Removing Membership Users

To remove Membership users in the Workarea, follow these steps.

1. In the Workarea, navigate to **Modules** > **Community Management** > **Memberships** > **Users**.
2. Click the check box next each user you want to remove.
3. Click the Delete button ( ).
4. Click **OK** in the dialog box that appears.

The page refreshes and the membership users are removed.

Do Not Allow the Use of Group User Accounts

☐ Do Not Allow the Use of Group User Accounts

A group account is an account that multiple people use to log in to CMS400.NET using the same username and password. This is a serious security issue as you lose the ability to accurately keep track of who is doing what in your Web site's environment. The use of a group user account is a violation of Ektron CMS400.NET's license agreement.

Additional Information

You *do not* need to make these changes if you are using the CMS400.NET for demonstration or evaluation purposes. These changes should be completed once the decision is made to purchase the product and go live with your site.

IMPORTANT! Ektron recommends creating your own Administrator user and deleting the Admin user.

IMPORTANT! Ektron recommends deleting any users from the CMS400.NET that are not needed on the system.

The Everyone Group

By default, the root folder in Workarea provides the Everyone Group with all permissions except Overwrite Library. Ektron Inc. recommends reviewing the permission needs of the Everyone Group when you add a folder. For information on Permissions, see the Administrator Manual section "Managing User and Permissions" > "Setting Permissions."

Editing Builtin

IMPORTANT! The "builtin" user does not appear in the Users list. This user appears on the application setup screen.

To change the builtin account information, follow these steps.

1. In the Workarea, click **Settings** > **Configuration** > **Setup**.

2. Click the Edit button ( ).
3. Locate the **Built In User** field.
4. Edit the built in user information by changing the username and password.
5. Click the Update button ( ).

NOTE If you cannot sign in to **Ektron CMS400.NET** because the builtin user password was changed and you don't know the new password, use the BuiltinAccountReset.exe utility. This resets your **Ektron CMS400.NET** user \ password to Builtin \ Builtin. This utility is located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities`.

ServerControlWS.asmx

> Best Practice
>
> For improved security, Ektron recommends renaming or removing the Web services file when you move it to your production server. After installation, this file is named ServerControlWS.asmx and resides in the *webroot*/*siteroot*/Workarea folder.

ServerControlWS.asmx is the Web service that lets the server controls talk to **Ektron CMS400.NET**. The path is coded in the web.config file. This is how it appears:

```
<!-- Web Service URL for Server Controls design time  --> <add key="WSPath" value="http://
localhost/CMS400Developer/Workarea/ServerControlWS.asmx" />
```

You will need to edit this line if you change the location or name of the ServerControlWS.asmx file.

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Introduction to Ektron CMS400.NET

Thank you for purchasing Ektron CMS400.NET, the best and most affordable solution for Web content management. We welcome you to use Ektron CMS400.NET to maintain, update, and modify the contents of your Web site. All these efforts are easily achieved while preserving the look and feel that you originally designed for your site. With Ektron CMS400.NET, the tasks of maintaining your site and updating content are passed on to subject experts. Based on the page layouts and processes that you create, the highest level of quality is preserved and maintained throughout the life cycle of the site.

See Also:

- ”About Ektron CMS400.NET” on page 1
- ”Who Should Read This Documentation?” on page 2
- ”Online Learning Center” on page 2
- ”Sample Site Used in this Document” on page 2
- ”Types of Users” on page 2
- ”Management of Content” on page 3
- ”Conventions of the Documentation” on page 4

About Ektron CMS400.NET

Ektron CMS400.NET is a powerful, easy-to-use, and affordable XML content management solution that empowers anyone to take an active role in managing Web content and optimizing online strategies. It streamlines site management, automates workflow processes, and supports collaboration. **Ektron CMS400.NET**

reduces costs, saves time and makes Web sites, extranets, and intranets more effective – while generating rapid ROI.

Business users, like marketing or PR pros, can author, manage and publish Web content, build and deploy Web forms, and collect and leverage visitor info. Our browser-based editor supports the industry's best in-context editing environment – ensuring user adoption and project success.

Ektron CMS400.NET also helps to move paper-based forms processes to the Web. Our editor lets users create Web forms such as expense reports, health records, and insurance forms, deploy them to internal users, collect data, apply validation and math functions, and run forms through workflow – all within a browser.

Who Should Read This Documentation?

This document introduces all the concepts, features, and instructions for using Ektron CMS400.NET as a Web administrator.

The Web administrator is the person who is responsible for adjusting the setup of the Web site, and alters the site as institutional changes require. New areas needing to be added to the Web site, the changing of personnel and processes over time may cause these adjustments.

Online Learning Center

Much of the information in this documentation is also presented in a tutorial, animated format on Ektron's Web site. To access Ektron's CMS400.NET Web Training, go to http://www.ektron.com/cms400-web-cms.aspx?id=922.

Sample Site Used in this Document

This documentation uses the sample ASPX Web site installed with Ektron CMS400.NET to explain and demonstrate functionality in a Ektron CMS400.NET controlled Web site.

Types of Users

Ektron CMS400.NET lets you control the content of your Web site. The tasks of creating and maintaining your Web site are allocated

among different types of users. The types of Ektron CMS400.NET users are:

User	Job
Developer	Builds templates
Administrator	Sets up the site, adds users and user groups, sets permissions, and maintains the library
Content Contributor	Maintains Web site by adding, modifying, and publishing content.

You assign privileges to Ektron CMS400.NET users based on the actions for which they are responsible. Each user may be assigned any or all types of privileges. Users without administrative permissions are known as content contributors.

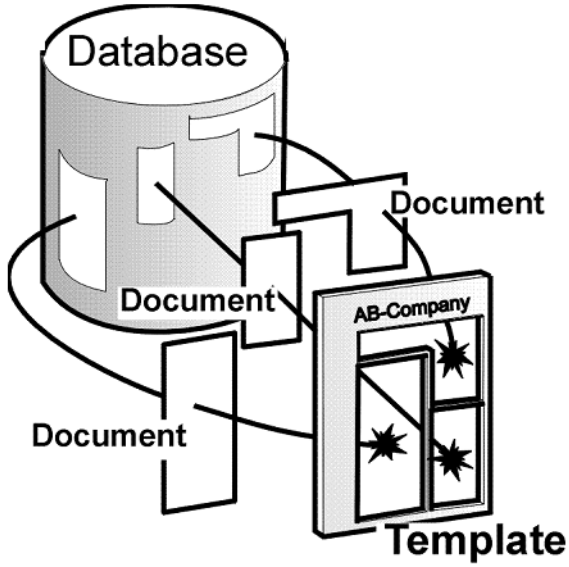
This document describes features and actions available to a user with administrative privileges. Information about Ektron CMS400.NET's editing and publishing features may be found in the Ektron CMS400.NET User Documentation.

Management of Content

The Ektron CMS400.NET content manager uses database technology to store, build, and retrieve Web page content. The placement of the content on a Web page is determined by templates, which you can build with external tools. Ektron extends VisualStudio to support the template design process.

Templates can be thought of as mechanical layouts of your Web pages. They incorporate powerful custom functions that Ektron CMS400.NET uses to manage your content. Each content item is

assigned a unique ID. Ektron CMS400.NET uses the ID to retrieve content from the database.



If during the evolution of your site the need for a new template arises, you simply create a new one, store it in a directory accessible to Ektron CMS400.NET, and create new content that uses the new template. You can even modify the layout of an existing template, reincorporate it, and the content automatically flows into and adjusts to the new layout.

For more information, see ”Creating/Updating Templates” on page 70.

Conventions of the Documentation

This document‘s typographic styles and conventions are explained below.

Convention	Explanation
Bold	Bold type indicates a menu selection, field or text that you must select.
`Courier New`	Courier New font indicates code that you may enter.
Note:	Notes indicate special conditions or issues that the reader should be aware of.

Convention	Explanation
WARNING!	A warning indicates very important information that should be followed. Inattention to a warning can produce undesirable results.
Italic	Italic text indicates either a title that is being cited or a special use of a word that might be confused with common world terms.

License Keys

Introduction

Ektron controls the use of CMS400.NET through a license key, a unique code assigned to your domain when you purchase CMS400.NET. Your license key is included in the email that Ektron sends when you request or purchase CMS400.NET.

License Key Types

There are three levels of license keys available for use with Ektron CMS400.NET. The features that are available in your specific version of CMS400.NET depend on the license key you purchase. The table below shows the major features at each level.

Features List	Enterprise	Professional	Standard
eSync	✓	Optional	
Multi-site	✓	Optional	
eCommerce	Optional	Optional	
Personalization	✓	✓	
XLIFF Support	✓	✓	
Document Management	✓	✓	

Features List	Enterprise	Professional	Standard
Social Networking	✓	✓	
URL Aliasing	✓	✓	✓
All Other Ektron CMS400.NET Features	✓	✓	✓

License Key Format

A license key typically begins with a base URL (domain name, computer network name, or IP address) followed by descriptor tags, a question mark, a series of numbers, a hyphen and one or two digits signifying release number. For example:

```
dev.mysite.com(exp-2008-10-25)(modifiers)(users-
10)?5151083779678606306492433441 6-XX
```

License keys cannot contain spaces or line breaks.

Inserting the License Key

If you download the executable (.exe) file, you are prompted to enter a license key during installation. If you choose not to install the license key during the installation, you can enter it by navigating to Workarea > Settings > Setup and clicking the Edit button. Once you are in edit mode, add the license key to the License Key(s) text box.

Changing License Keys Upon Upgrade

If you upgrade to a new release of CMS400.NET and want to replace the old license key with a new one, navigate to Workarea > Settings > Setup and click the Edit button. Once you are in edit mode, add the license key to the License Key(s) text box. On the other hand, if you want to add new keys *in addition to* old keys, create a comma delimited list of keys in the License Key(s) text box.

When cutting and pasting license keys, keep the full license key intact without adding or deleting characters. License keys that are changed in any way render CMS400.NET inoperable.

WebImageFX License Keys

If you are installing WebImageFX with CMS400.NET, a WebImageFX license key is included in the email you receive when you purchase CMS400.NET. A WebImageFX key resembles a CMS400.NET key but includes the string `wifx`.

To add the key to CMS400.NET, navigate to Workarea > Settings > Setup and clicking the Edit button. Once you are in edit mode, add the license key to the Module Licenses text box.

License Key Check

When you login to a Web site that contains CMS400.NET, it checks the license key(s) against the domain.

If the URL of a valid license key matches the URL of the site being accessed, the Workarea appears.

If no valid license key is found for the URL of the site being accessed, CMS400.NET is disabled and you must log in the with Built-in account to change the License Key.

Invalid License Key Message

If you have a broken license key or a license key with an incorrect base URL, an error message appears in the CMS400.NET Login window. The message states, “Error: A license violation has occurred and the application is presently locked. Please see your administrator.”

If this message appears, you can login with the Builtin account and reenter your license key. If the message continues to appear and you are sure you have a valid key, contact Ektron Support.

Using CMS400.NET without a License Key

For evaluation purposes, when you install CMS400.NET, you do not need a license key. During the installation process, leave the License Key field blank and click the next button on the License screen. This allows you to use CMS400.NET as localhost.

Domains in which You Can Use the License Key

The license key is assigned to your base URL, which is typically your domain name. For example, if your domain name is `www.mycompany.com`, the license key follows this pattern: `www.mycompany.com(expdate)(Modifers)?1234567890`.

Each domain name requires its own license key. For example, to support the domain names, `www.mycompany.com`, `sales.mycompany.com` and `support.mycompany.com`, you need three license keys.

Register Domains, not IP Addresses

When you purchase a license key, be sure to register a domain name, not an IP address. For example, register `www.mycompany.com`, not `192.168.0.1`.

Although CMS400.NET supports IP addresses, the domain that you license becomes the required URL in the browser address. For example, if you register `192.168.0.1`, you would need to access the site as `http://192.168.0.1/somedirectory/myloginpage.aspx`.

Since users would typically not identify a Web page by its IP address, you should register the domain name instead.

More Information

Additional information about licenses is available at http://www.ektron.com/products.aspx?id=1144.

Getting Started

Now that you have installed Ektron CMS400.NET, what's next? This chapter explains several resources supplied by Ektron to help get your Ektron CMS400.NET Web site up and running.

This section has the following topics:

- "Logging Into an Ektron CMS400.NET Web Site" on page 10
- "Password Management" on page 15
- "Accessing the Workarea" on page 17
- "Workarea Navigation" on page 19
- "Using the Web Site Interface" on page 20

Logging Into an Ektron CMS400.NET Web Site

See "Logging In and Out" in the **Ektron CMS400.NET** User Manual.

Note

If needed, you can adjust the width of the login screen. This may be necessary if you use Active Directory and have long database names. Use the `ek_LoginScreenWidth` element of the web.config file to adjust the width.

This section contains the following topics relating to logging in.

- "Restricting Login Attempts" on page 10
- "Changing Images Used for Logging In and Out" on page 13
- "Resolving Problem with Login Screen" on page 14

Restricting Login Attempts

Ektron CMS400.NET has a login security feature that, by default, locks out a user after five unsuccessful attempts to log in by a user on one computer. This section explains the flexibility you have in controlling this feature.

You can control the following capabilities.

- "Changing the Number of Unsuccessful Login Attempts" on page 11
- "Disabling the Login Attempts Feature" on page 13
- "Unlocking a Locked Account" on page 12
- "Preventing CMS Users from Signing On" on page 13
- "Preventing All Users from Signing On" on page 13

You control login security feature by changing the value of the `ek_loginAttempts` element in the web.config file. The following table summarizes your options.

WARNING! If you want your Ektron CMS400.NET eCommerce feature to comply with Payment Application Data Security Standard (PA DSS) certification, the `ek_loginAttempts` value must be between 1 and 6.

Value	Description
any number between 1 and 254	
0	Lock out all users
-1	Disable feature; unlock all locked users
-2	Lock out CMS users only; membership users can still log in

Changing the Number of Unsuccessful Login Attempts

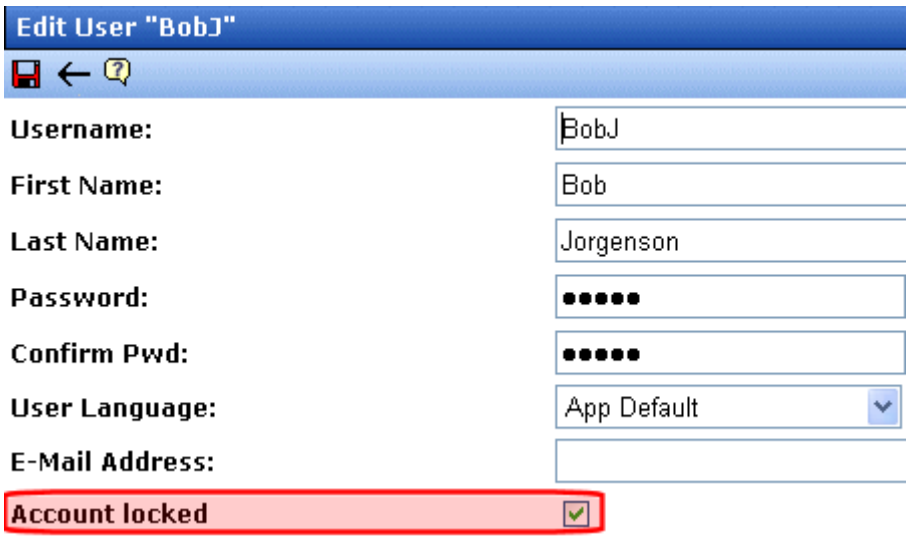
By default, if a user unsuccessfully tries to log in five times, the following error message appears: **The account is locked. Please contact your administrator**. Afterwards, even if the user enters the correct password, he is locked out, and the error message reappears.

NOTE You can change the text of the error message in the resource file. To learn about editing the resource file, see "Procedure for Translating Workarea Strings" on page 929

To change the number of unsuccessful login attempts that occur prior to lockout, edit the value of the `ek_loginAttempts` element in the web.config file. (The web.config file is located in your site's root directory.) For example, to allow only three unsuccessful logins, change the `value` to **3**. You cannot enter a value greater than **254**.

Unlocking a Locked Account

Once an account is locked out, the **Account Locked** field is checked in the user settings.



To unlock the account, an administrator user (or a user assigned to the user-admin role) accesses the Edit User screen and unchecks the box. At this point, the user can attempt to sign in again.

NOTE If you want to unlock *all* locked users at once, set the value of the `ek_loginAttempts` element in the web.config file to **-1**. For more information about the effects of this setting, see "Disabling the Login Attempts Feature" on page 13.

Manually Locking a User from Signon

You can use the **Account Locked** field (described above) to manually lock a user out of **Ektron CMS400.NET**. To do so, go to the Edit User screen, identify the user, and check the **Account Locked** field.

That user cannot sign in until either you reverse the above procedure and uncheck the box, or you change the value of the `ek_loginAttempts` element in the web.config file to **-1**.

Disabling the Login Attempts Feature

To disable the Login Attempts feature, set the value of the `ek_loginAttempts` element in the web.config file to **-1**. If you do, any user can try to log in as many times as he wants. The error message never appears, and he is not prevented from entering a password.

NOTE Setting the value of the `ek_loginAttempts` element in the web.config file to **-1** automatically unlocks all locked accounts.

Preventing CMS Users from Signing On

If you want to lock out all CMS users, set the `ek_loginAttempts` element in the web.config file to **-2**. If you do, only membership users can sign in.

NOTE The builtin user cannot sign in if `ek_loginAttempts` is set to **-2**.

Preventing All Users from Signing On

If you want to lock out all users (including membership users), set the `ek_loginAttempts` element in the web.config file to **0**. If you do, no one can sign in to **Ektron CMS400.NET** until you change the value.

NOTE The builtin user cannot sign in if `ek_loginAttempts` is set to **0**.

Changing Images Used for Logging In and Out

You can change the images used for the login and logout buttons. To do so, follow these steps.

1. Move the new images to the following folder: *webroot\your site's root directory*\Workarea\images\application.
2. Open the web.config file in your Web site's root directory.
3. Change the images referenced in this section of the file:

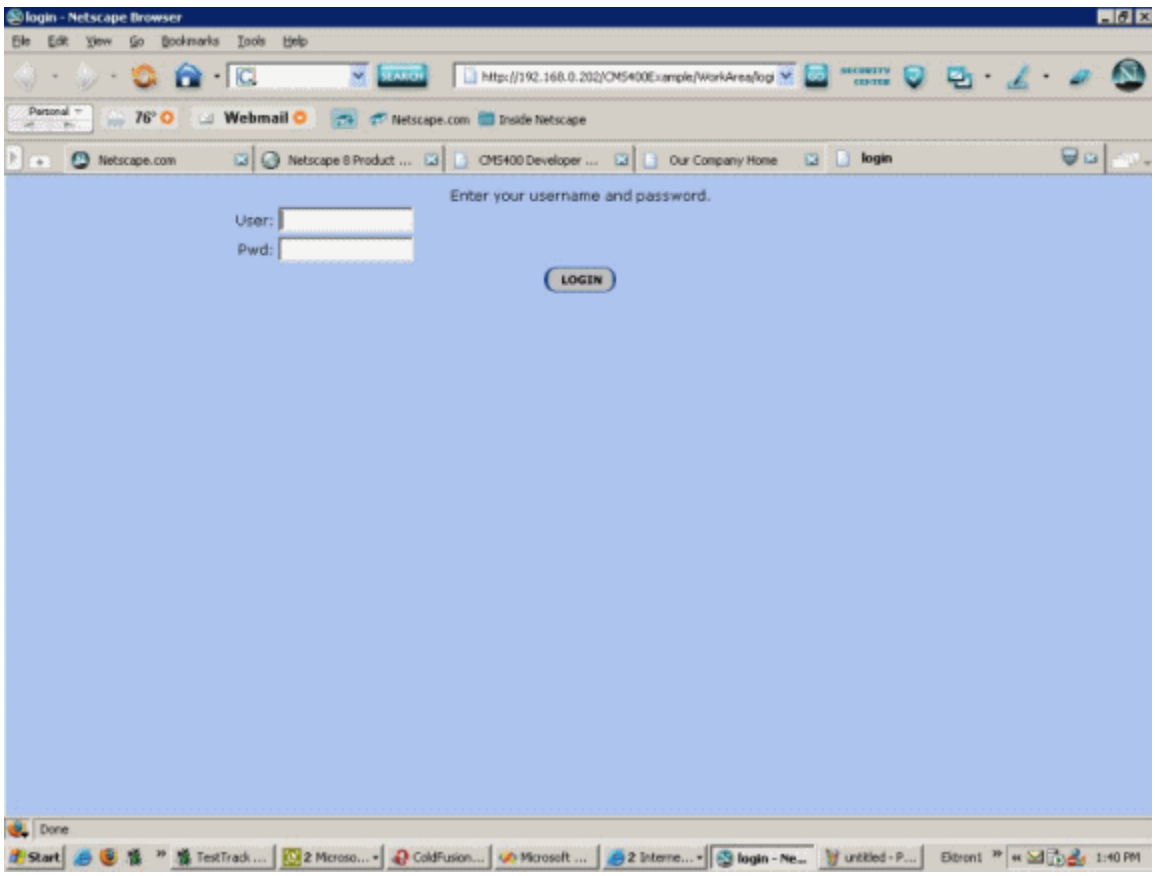
```
<add key="ek_Image_1" value="btn_close.gif" />
```

```
<add key="ek_Image_2" value="btn_login.gif" />

<add key="ek_Image_3" value="btn_login_big.gif" />
```

NOTE You must update the images and web.config each time your system is updated.

Resolving Problem with Login Screen

You may find that in certain browsers, the login screen occupies the entire browser window instead of just a small box (see illustration below).



Browsers such as Netscape 8 and Firefox have a feature called tabs. When the login window pops up, it appears as a new tab as shown above.

You can fix this problem by turning off tabs within the browser.

Password Management

This section contains the following topics relating to managing passwords.

- ”Making Passwords Case Sensitive” on page 15
- ”Forcing Password Change Every 90 Days” on page 15
- ”Passwords Must Be Seven Characters Minimum, Include Alpha and Numeric Characters” on page 16
- ”New Passwords Cannot Match the Last Four Passwords” on page 16
- ”After 15 Minutes of Inactivity, User Must Log in Again” on page 16

WARNING! The last four topics require you to set the `ek_ecom_ComplianceMode` key in the site’s Web.config file to `true`. If you do this, your site will need an SSL certificate. You cannot access the Workarea until the certificate is installed or you turn compliance off.
For more information, see the Ektron CMS400.NET PA DSS Security Guide.

Making Passwords Case Sensitive

By default, passwords are case *insensitive*. So for example, if the password is TOKEN and the user enters **token**, the signon is successful.

If you want to make passwords case *sensitive*, change the value of the `ek_passwordCaseSensitive` element of the web.config file from `false` to `true`. (The web.config file is located in your site’s root directory.)

If you do, and the password is TOKEN and the user enters **token**, the signon is unsuccessful. The user would have to enter **TOKEN** to successfully sign on.

Forcing Password Change Every 90 Days

Ektron CMS400.NET has a password security feature that forces an administrator or user with the Commerce Admin role to change his

password at least every ninety days. This feature is only enabled when the `ek_ecom_ComplianceMode` key in the site's Web.config file is set to `true`.

Once an administrator or user with the Commerce Admin role goes eighty-five days without changing his password, a dialog box appears at next log-in, asking them to change their password. If they do not want to change their password at that time, they can click the **Skip** button. They are allowed to do this for the next five days. Once ninety days have passed, they must change their password before they can log into **Ektron CMS400.NET**.

Passwords Must Be Seven Characters Minimum, Include Alpha and Numeric Characters

Ektron CMS400.NET has a password security feature that forces an administrator or user with the Commerce Admin role to use at least seven characters in his password. Further, the password must contain at least one alphabetic and one numeric character.

This feature is only enabled when the `ek_ecom_ComplianceMode` key in the site's Web.config file is set to `true`. *See Also:*

New Passwords Cannot Match the Last Four Passwords

Ektron CMS400.NET has a password security feature that forces an administrator or user with the Commerce Admin role to have a password that does not match any of his last four passwords. This feature is only enabled when site's Web.config file has the `ek_ecom_ComplianceMode` key is set to `true` and the `ek_ecom_PasswordHistory` key is set to at least four.

You can set `ek_ecom_PasswordHistory` to a number higher than four if you want a higher level of security. If you set this key to less than four and the `ek_ecom_ComplianceMode key` is set to `true`, **Ektron CMS400.NET** enforces at least four.

After 15 Minutes of Inactivity, User Must Log in Again

Ektron CMS400.NET has a password security feature that automatically logs an administrator or user with the Commerce Admin role out of the application after 15 minutes of inactivity. Activity is based on requests made to the server.

This feature is enabled when the site's Web.config file's `ek_ecom_ComplianceMode` key is set to `true`. In addition, if you are using *IIS7*, the line in red below needs to appear between the `<modules>` tags in the Web.config file. This line is a part of the default install. You should make sure it has not been removed.

```
<modules>
<add name="MyDigestAuthenticationModule"
type="Ektron.ASM.EkHttpDavHandler.Security.DigestAuthenticationModule,Ektron.ASM.EkHttpDavHan
dler" />

<add name="ScriptModule" type="System.Web.Handlers.ScriptModule, System.Web.Extensions,
Version=1.0.61025.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35"
preCondition="integratedMode" />

<add name="EkUrlAliasModule" type="UrlAliasingModule" preCondition="integratedMode" />

</modules>
```

If you are using *IIS 6*, the line in red below needs to appear between the `<httpModules>` tags in the Web.config file. This line is a part of the default install. You should make sure it has not been removed.

```
<httpModules>
<add name="DigestAuthenticationModule"
type="Ektron.ASM.EkHttpDavHandler.Security.DigestAuthenticationModule,Ektron.ASM.EkHttpDavHan
dler " />

<add name="ScriptModule" type="System.Web.Handlers.ScriptModule, System.Web.Extensions,
Version=1.0.61025.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35"/>

<add name="EkUrlAliasModule" type="UrlAliasingModule" />

</httpModules>
```

Accessing the Workarea

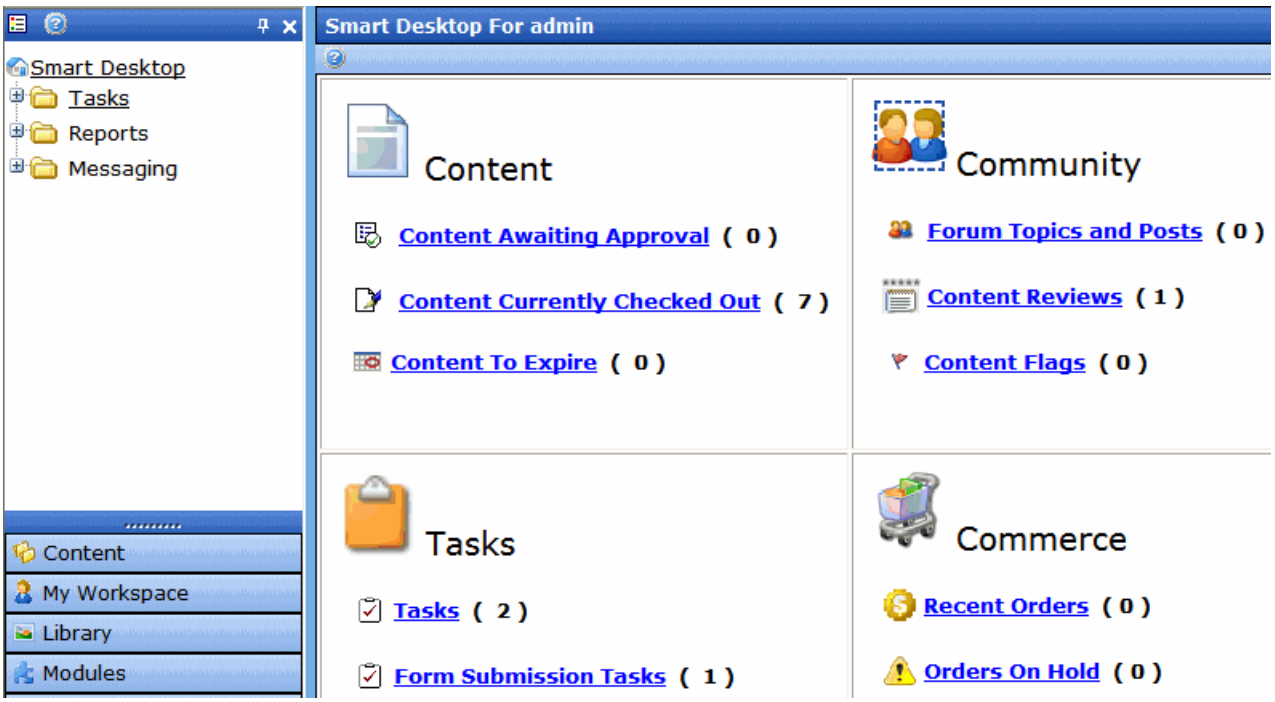
Once logged into Ektron CMS400.NET, you can edit content by navigating to the page or accessing the Workarea. From there, you can perform all activities, such as configuring and viewing every setting of Ektron CMS400.NET.

NOTE To learn about editing content by navigating to its page, see "Using the Web Site Interface" on page 20.

To access the Workarea, follow these steps.

1. Log in to your Web site, as described in "Logging Into an Ektron CMS400.NET Web Site" on page 10.
2. Click the Workarea button (Workarea) on a login page or a **Workarea** toolbar button ( ).

   The Workarea has a Windows Explorer-like interface.



When you first access your Workarea, your Smart Desktop is displayed. The Smart Desktop contains useful information that pertains to you.

NOTE In the Application Setup screen, you can determine which screen appears when you access the Workarea. *See Also:* "Set smart desktop as the start location in the Workarea" on page 27

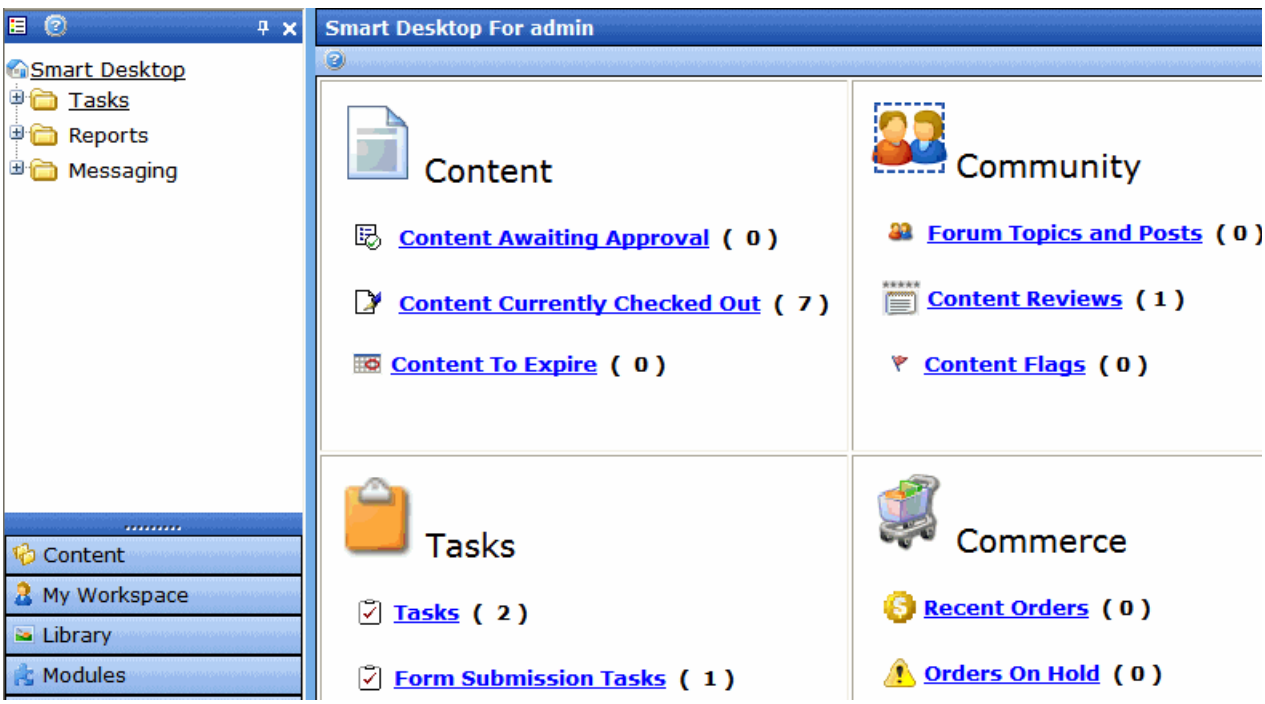
For more information about the Smart Desktop, see the **Ektron CMS400.NET** User Manual section "The Workarea and Smart Desktop" > "Understanding the Smart Desktop."

Workarea Navigation

The **Ektron CMS400.NET** administrator Workarea is divided into two frames:

- the left frame displays the system's folders
- the right frame displays common reports (For more information, see "Content Reports" on page 147)

NOTE Each category in the right frame is followed by a number indicating how many content items are in that status. **Content to Expire** lists how many content items will expire within ten days. By going to the report (**Smart Desktop > Reports > Content To Expire**) and changing the number of days, you can view a list of content to expire in that amount of time.
The number next to Tasks indicates how many open tasks are assigned to, or have been assigned by, you. Open tasks are those in one of the following states: not started, active, awaiting data, on hold, pending, reopened.



To learn more about the Workarea, see the section of the **Ektron CMS400.NET** User Manual titled "Understanding the Smart Desktop."

Closing the Workarea

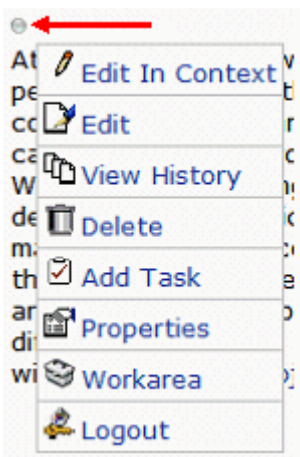
To close the Workarea, click the ( ) button in the upper right corner.

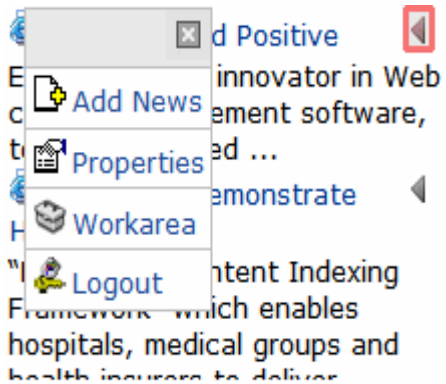
When you close the Workarea, you return to the Ektron CMS400.NET view of your Web site but do not exit Ektron CMS400.NET.

Using the Web Site Interface

As mentioned in the **Ektron CMS400.NET** User Manual section "Introduction to Ektron CMS400.NET" > "Working with Content from your Web Site", users and administrators can perform actions using either the Workarea or the Web site. The Web site has two types of dropdown menus that appear after users sign in and enable users to perform actions.

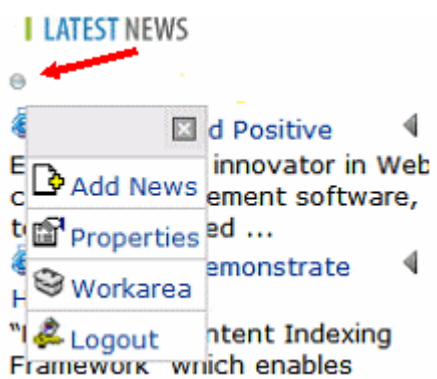
NOTE The menus do not appear if you are in site preview mode. To learn about Site Preview mode, see "Logging In and Out" > "Site Preview" in the Ektron CMS400.NET User Manual.

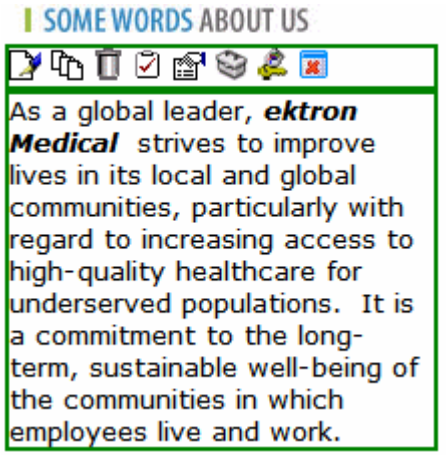
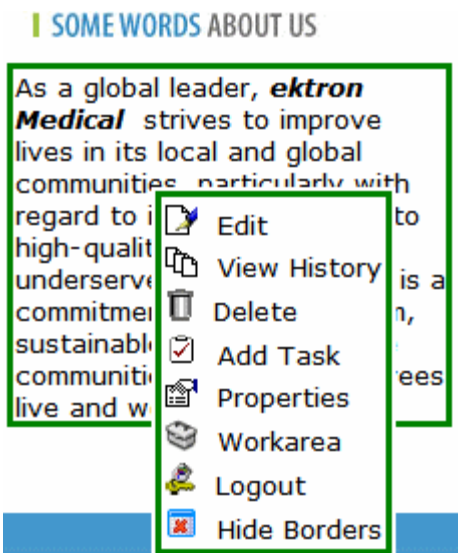
Menu Type	Illustration	For more information, see
Content - the Silver Access Point appears in upper left corner of server control. Click it to display menu.		"Changing the Appearance of the Web Site Content Menu" on page 21 Note: To change the styling of the content menu, edit EktronEditorsMenu.css in your site root's `Workarea/csslib` folder.

Menu Type	Illustration	For more information, see
Server control - triangle appears to right of content. Click it to display menu. Menu is available from most server controls, such as Content Block, Collection, List Summary and Metadata List. The options depend on the control and user's folder permissions.		

Changing the Appearance of the Web Site Content Menu

You have three choices for determining the appearance of the Web Site Content menu. To make your choice, edit the `ek_UserMenuType` element of the *siteroot*/web.config file. By default, `ek_UserMenuType` is set to **2**.

Value set in **ek_UserMenuType**	Description	Illustration
2 (default)	**Dropdown Interface** - No borders; dropdown menu appears when user clicks the Silver Access Point in top left corner of server control	

Value set in ek_UserMenuType	Description	Illustration
1	**Classic Interface** - Colored borders and menus always appear; menu options appear as icons in the top row Note: If you use this interface, the page layout is not depicted accurately because of the fixed toolbars.	
0	**Hover Interface** - Colored border appears when user hovers mouse over area; menu appears when user right clicks mouse inside border. This interface has two display options: vertical (*shown on right*) and horizontal. To change: 1. Open the *siteroot*/web.config file. 2. Find `ek_MenuDisplayType`. 3. Change its value: 0 (zero) = horizontal 1 = vertical	

Modifying the Application Setup Screen

In the setup section of the configuration folder, you can enter or edit information for the Ektron CMS400.NET Web site including:

- License keys
- Default language
- Maximum content and summary sizes
- email notification
- Physical library folders on file server
- Builtin user information
- Editor options
- Work page size settings

You must complete this before any user can access your Ektron CMS400.NET Web site.

- ”Enabling WebImageFX” on page 28
- ”Enabling CMS to Create File System Folders” on page 29
- ”BuiltIn User” on page 30
- ”Editor Options” on page 31

NOTE Only members of the Administrator User Group can view and edit the Application Setup screen.

Viewing Application Setup Information

To view Ektron CMS400.NET setup information, follow these steps.

1. Access the Workarea. *See Also:* ”Accessing the Workarea” on page 17

2. Click **Settings > Configurations > Setup**.
3. The Application Setup screen is displayed.

Updating Setup Information

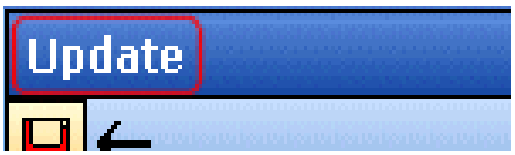
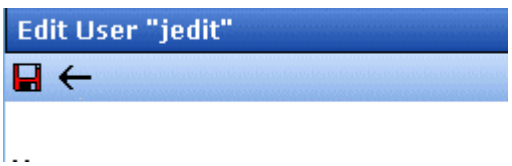
To update setup information, follow these steps.

1. Access the Application Setup screen, as described in "Viewing Application Setup Information" on page 23.
2. Click the Edit button ( ).
3. The Application Setup screen appears. Update the fields as needed. The following table explains the fields.

Field	Description
License Key(s)	Enter the license key sent to you from Ektron via email into this field.
Module Licenses	Enter the license key for WebImageFX that was sent to you via email. See "Enabling WebImageFX" on page 28 for more information.
Default Application Language	Select a default language for Ektron CMS400.NET. **How a User's Application Language Affects His Use of Ektron CMS400.NET** This user's language determines the screens and messages that appear in **Ektron CMS400.NET**. **How the System Default Language Relates to a User's Language Setting** In the user profile, you can set each user's language. You can set any user's language to system default. Each user whose language is set to system default uses the language assigned here. Note: Do not confuse this default application language with the ek_DefaultContentLanguage variable in web.config. For more information on that variable, see "The Default Language" on page 882.
Maximum Content Size	In characters, limit the size of each content item by specifying a maximum size. If a user's changes to content result in exceeding this limit, the user is told to reduce the content before he can save it. It cannot exceed 1,000,000 characters.

Field	Description
Maximum Summary Size	In characters, limit the size of each summary by specifying a maximum size. If a user's changes to a summary result in exceeding this limit, the user is told to reduce the summary before he can save it. It cannot exceed 65,000 characters.
System email Address	Enter a valid email address. This address will appear in the **From** field in the notification emails.
Enable Sending of System Notification Email	Check the box to enable email notification for the entire CMS. Un-checking this box disables email notification, regardless of whether individual users have their email enabled.
Asynchronous Processor Location	If your site uses the Web Alerts feature, enter or update the location of the asynchronous processor Web Services file. The default location appears below. *See Also:* "Setting Up the Message Queue and Asynchronous Processor" on page 1027
This is a Staging Server	Check this box if you want your library links to refer to the staging server domain, as opposed to the production server domain. This would help you verify that the linked items exist on the staging server. *See Also:* "Setting up Staging Multi-sites" on page 1368
Publish in Other Format: Enable Office documents to be published in other format	Check the box to allow **Ektron CMS400.NET** to render Office documents in PDF format. When a checked, PDF generation is available for individual folders. *See Also:* "Should Office documents added to this folder be published in other format?" on page 45
Library Folder Creation: Enable CMS to create file system folders for library assets	Check the box if you want to create physical folders on your file system server that match the Ektron CMS400.NET library folder tree. *See Also:* "Enabling CMS to Create File System Folders" on page 29
Built - in User	Edit the username and/or password for the built in user. By default, the username and password combination is **builtin/builtin**. Important! Ektron strongly urges you to change the default password assigned to the builtin user. An opportunity to do this is presented during installation. *See Also:* "BuiltIn User" on page 30
Editor Options	Toggle between displaying and not displaying font related buttons in the editor. Also choose to remove styles and preserve MS Word styles and classes. *See Also:* "Editor Options" on page 31

Field	Description
Accessibility/Section 508 Evaluation	"Validating Content For Compliance with Accessibility Standards" on page 106
Work Page Size The following fields change the • default editor screen size • whether button text appears in the title bar • default Web page after sign-in • default Workarea page The default values are automatically applied to all new users, and to all existing users when you upgrade. Normally, you can modify these values for any user via the Edit User screen. But, you can force these values on all users, removing the ability to personalize them.	
Width	If desired, change the width of the screen in which **Ektron CMS400.NET** appears. The width in pixels must be between 400 and 2400. This field accommodates users who have larger monitors and/or prefer a higher resolution, such as 1280 x 1024. The default value for this setting is 790.
Height	If desired, you can change the height of the screen in which **Ektron CMS400.NET** appears. The height in pixels must be between 300 and 1800. This field accommodates users who have larger monitors and/or prefer a higher resolution, such as 1280 x 1024. The default value for this setting is 580.

Field	Description
Display button text in the title bar	Check this box if you want any button's caption text to appear in the screen title's bar whenever a user moves the mouse over the button. Note the word **Update**, describing the button, in the illustration below  If you do not check this box, the screen's title remains in the title bar when the user moves the mouse over the button, as illustrated below. 
Landing Page after login	If you want one page in your Web site to appear after users sign in, enter the URL to that page. You can click **Select Page** to browse to the landing page. The last published version of the page appears. If the page has never been published, nothing appears. By default, the page from which the user logged in reappears.
Set smart desktop as the start location in the Workarea	If you want the Smart Desktop to appear as soon as users enter the Workarea, click inside this check box. *See Also:* "Workarea Navigation" on page 19 By default, the user sees the Smart Desktop after sign in. If you leave this check box blank, when you enter the Workarea, you go to the folder of the content specified at the **Landing Page after login** field.
Force preferences to all users	To force these settings on all **Ektron CMS400.NET** users, check this box. If you do, users can see the values in the user profile screen but not change them. If you leave this box blank, users can personalize these values in their User Profile.

Field	Description
Enable Verify email?	Check this box if users should be notified whenever they subscribe to an email notification list. *See Also:* "What Happens if Verification email is Used" on page 1055 **Warning!** When using the Checkout Server Control on an eCommerce site, the **Enable Verify Email** setting must be unchecked. Otherwise, new users will receive an error message when they sign-up using this control. For information on the Checkout Server Control, see the "eCommerce" > "Checkout Server Control" section in the CMS400.NET Developer Reference Manual.
Enable PreApproval Group	Use this field to enable Automatic Task Creation. *See Also:* "Automatic Creation of Tasks Associated with Content" on page 371

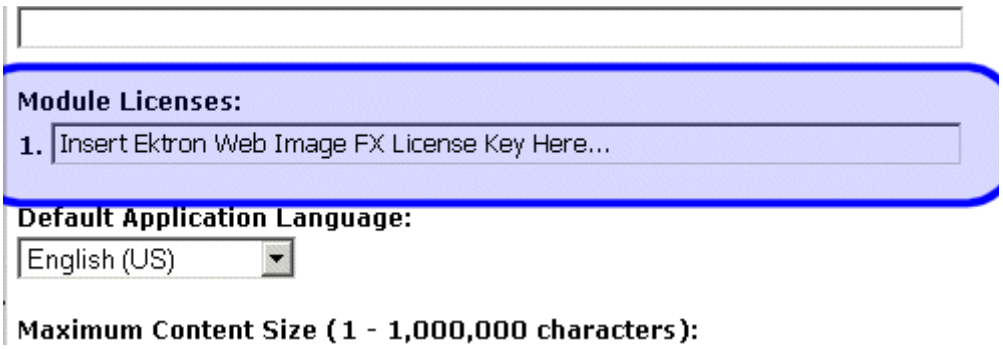
4. Make the necessary changes.
5. Click the Update button ( ).

Enabling WebImageFX

When purchasing Ektron CMS400.NET, you had the option to purchase Ektron WebImageFX as well. WebImageFX is an imaging application that allows users to edit images online.

If you purchased WebImageFX when you purchased Ektron CMS400.NET, you should have received an email with a license key for WebImageFX as well.

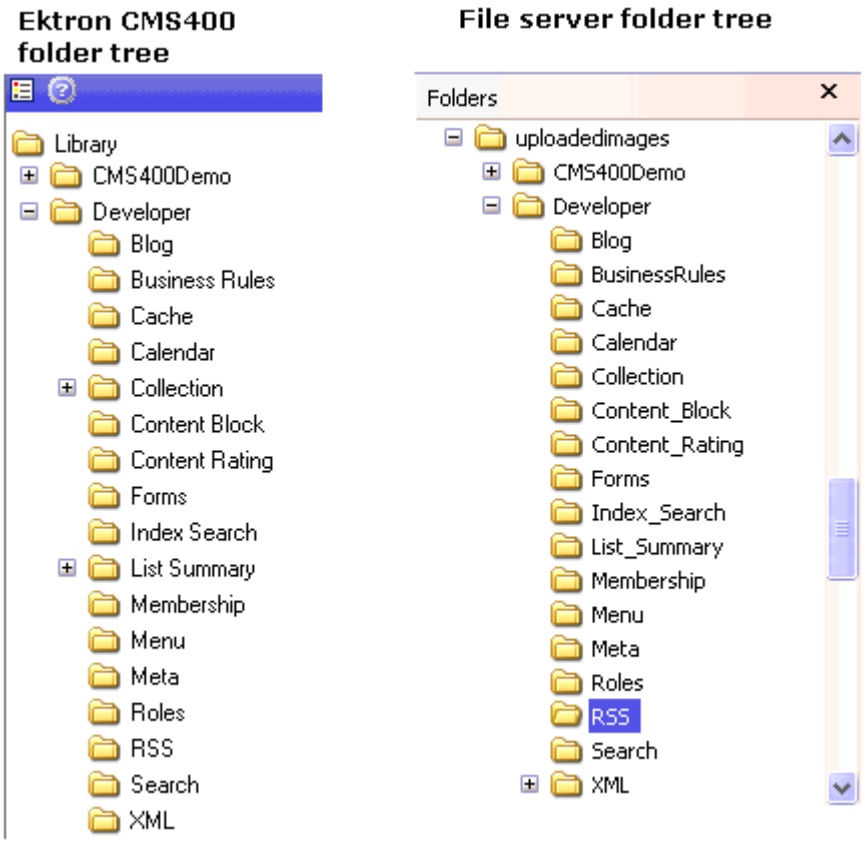
To enable WebImageFX within Ektron CMS400.NET, from the application setup page, insert the WebImageFX license key in the **Module License** field.


Module Licenses:
1. Insert Ektron Web Image FX License Key Here...
Default Application Language:
English (US)
Maximum Content Size (1 - 1,000,000 characters):

Enabling CMS to Create File System Folders

If this option is enabled, each time a new content/library folder is created in Ektron CMS400.NET, a corresponding physical folder is created on the file system. This helps organize library assets on your file server.

The following illustration compares the library folder tree with the file system's folder structure.



NOTE If upgrading, the installation does not the create sample Web site's folders on the file server. These folders must be added manually. However, all folders created by you are also created on the file server when enabled.

BuiltIn User

The builtin user is a user that is defined in the Ektron CMS400.NET setup screen. Primarily, he's an emergency user if you cannot log in to Ektron CMS400.NET as the administrator.

NOTE The builtin user can log in to Ektron CMS400.NET whether or not Active Directory or LDAP is enabled.

Only use the builtin user to correct a bad or expired license key. It is not designed for regular CMS operations. If you try to edit content while signed on as this user, you see errors.

IMPORTANT! By default, the username and password combination for the builtin user is builtin/builtin. For security reasons, Ektron recommends changing the username and password upon installation.

Editing the BuiltIn User

To edit the builtin user's information, follow these steps.

1. Accessing the Edit Application Setup Information screen, as described in "Updating Setup Information" on page 24.
2. Locate the **Built In User** field.
3. Edit the built in user information by changing the username and password.
4. Click the Update button ( ).

NOTE If you cannot sign in to **Ektron CMS400.NET** because the builtin user password was changed and you don't know the new password, use the BuiltinAccountReset.exe utility. This resets your **Ektron CMS400.NET** user \ password to Builtin \ Builtin. This utility is located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities`.

Editor Options

Style sheets greatly reduce the source code (and thereby the size of) a content. For this reason, they are becoming more popular than font-related tags for marking up content. The **Editor Options** section lets you determine how the editor handles this issue.

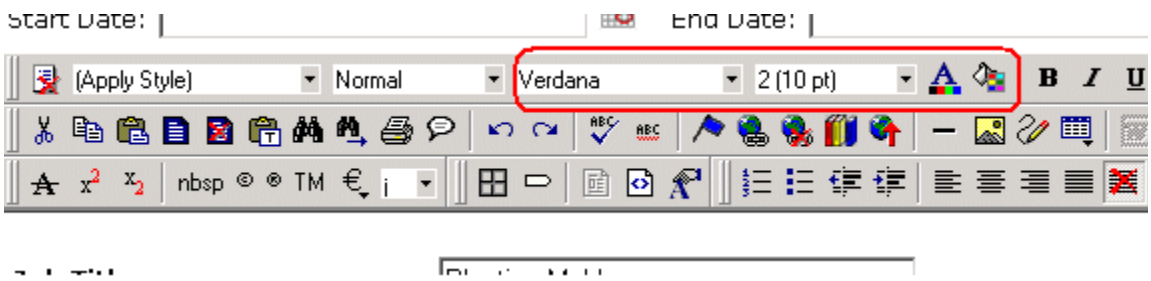
The following table explains the editor options you may set.

.

Editor Option	Description
Enable Font Buttons	This option displays the following font-related buttons on the editor toolbar: • Font Face • Font Size • Font Color • Font Background Color *See Also:* "Enable Font Buttons" on page 32;"Font Manager" on page 1079
Preserve MS-Word Styles	When content from MS Word is cut and pasted into the editor, the editor, by default, removes some MS Word styles. Checking this box prevents the editor from removing them. Note: Ektron does *not* recommend enabling this feature.
Preserve MS-Word Classes	Similar to styles, when content from MS-Word is cut and pasted into the editor, the editor, by default, removes some MS-Word classes. Checking this box prevents the editor from removing them.

Enable Font Buttons

Here is the editor with font related buttons enabled. To enable these buttons, check the **Enable Font Buttons** checkbox in the **Settings > Configurations > Setup** Screen.



Disable Font Buttons

Here is the editor with the font buttons disabled. To disable these buttons, uncheck the **Enable Font Buttons** checkbox in the **Settings > Configurations > Setup** Screen.

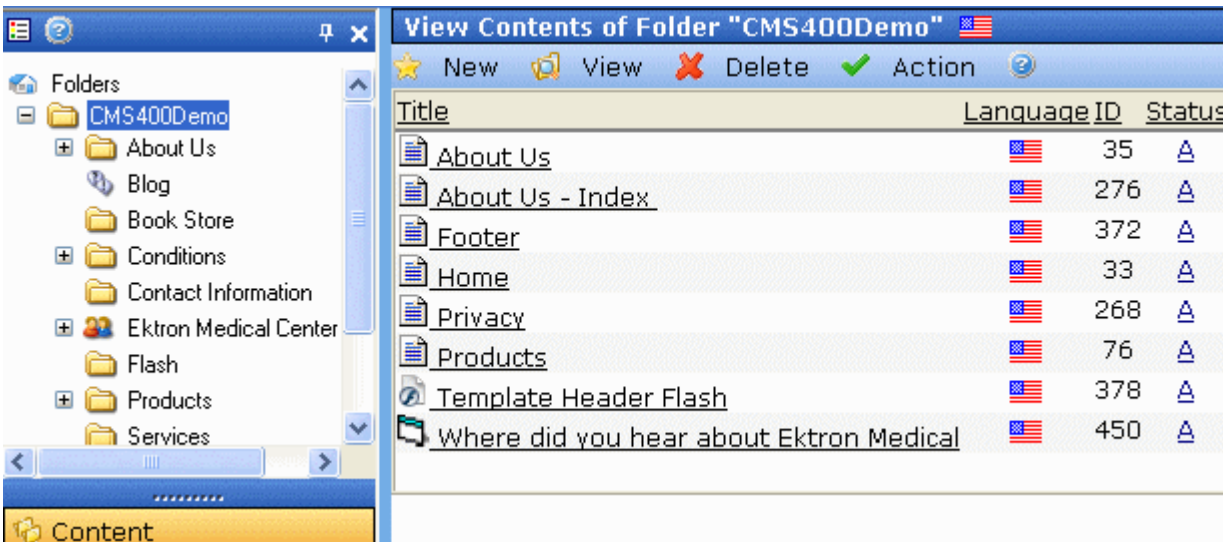
Managing Content

Ektron CMS400.NET's User Manual provide extensive information about how users create and work with content. This section explains content topics that only administrators can manage.

So, you should familiarize yourself with the User Manual chapter "Working with Folders and Content" before reading this.

Managing Content Folders

An administrator can control every aspect of the content and the folders that hold them. The controls include setting permissions, approvals, and adding, editing, publishing, and deleting content. Below is the content folder.



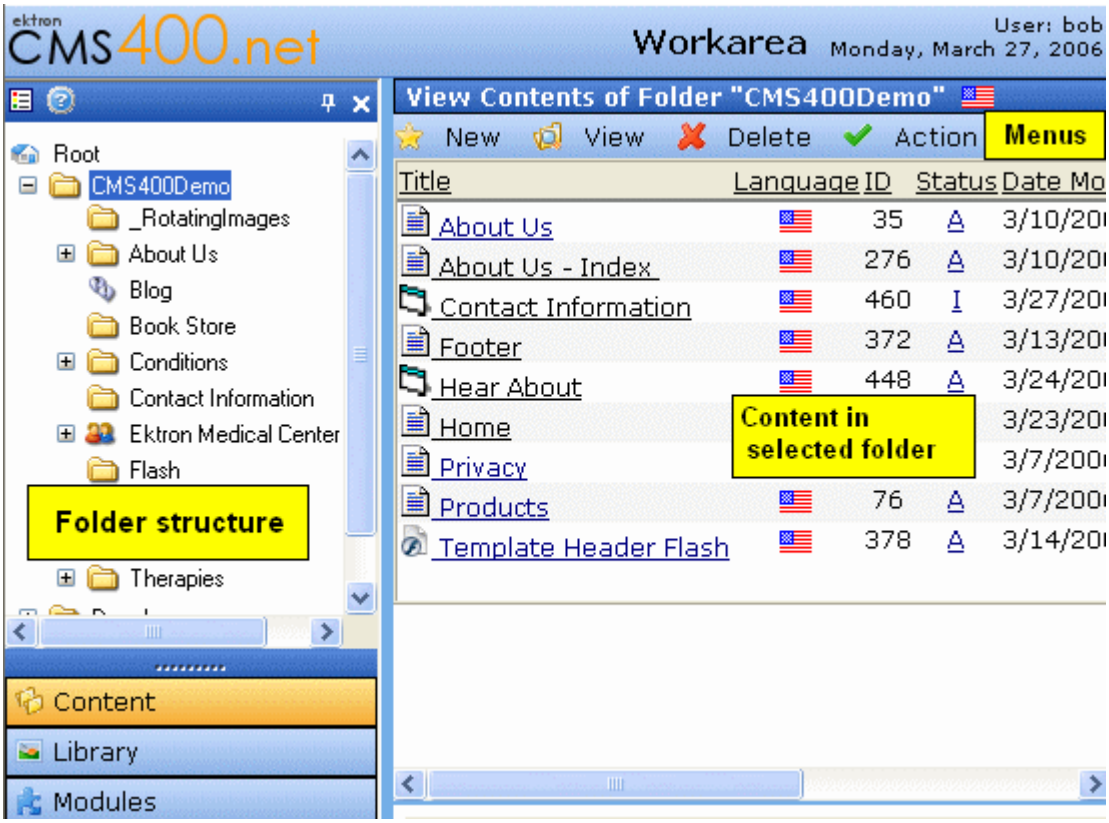
This chapter explains how to add, edit, publish, and delete content. It includes the following information:

- ”Accessing the Content Folder” on page 35
- ”Folder Properties” on page 41
- ”Adding Subfolders” on page 48
- ”Deleting Folders” on page 50
- ”Community Folders” on page 50
- ”Purge History” on page 56
- ”Smart Forms” on page 57
- ”Breadcrumbs” on page 59
- ”Search Content Folder” on page 68

Accessing the Content Folder

To access a content folder, follow these steps.

1. Access the Workarea.
2. Click the **Content** folder in left side of the Workarea.
3. All content in the root content folder appears in the right frame. In the left frame, the content folder expands to display its subfolders.



From this screen, you can perform administrative actions and maintain content. Each folder displays the following information about its content.

Field	Description
Title	The name given to the content by the creator.
Language	The content's language. *See Also:* "Working with Multi-Language Content" on page 876
ID	The number Ektron CMS400.NET assigns to the content. It is used to retrieve the content from the database.
Status	The content's status.

Field	Description
Date Modified	The most recent date that the content was added, edited, or published.
Last Editor	The last user who accessed the content.

Additionally, each folder has the following menus.

- ”New Menu” on page 37
- ”View Menu” on page 38
- ”Delete Menu” on page 39
- ”Action Menu” on page 40
- ”Add Assets Button” on page 40

New Menu

Menu Option	Creates the following new item within selected folder	For more information, see
Folder	folder	”Search Content Folder” on page 68
Blog	Blog	“Blogs” in the **Ektron CMS400.NET** User Manual
Discussion Board	Discussion Board	”Discussion Boards” on page 465
Community Folder	Community Folder	”Community Folders” on page 50
Catalog	eCommerce catalog folder Note: This folder type only appears if your license supports eCommerce.	”Creating a Catalog Folder” on page 1190
HTML Content	HTML content	”Adding Content” on page 79

Menu Option	Creates the following new item within selected folder	For more information, see
HTML Form/ Survey	HTML Form, Poll, or Survey	"Managing HTML Forms" on page 292
Smart Form	Smart Form	"Smart Forms" on page 57
Office Documents	Office Document	**Ektron CMS400.NET** User Manual Section "Using the Document Management Functionality" > "Working with Microsoft Office Documents"
Managed Files	Managed file, any supported type	**Ektron CMS400.NET** User Manual Section "Using the Document Management Functionality" > "Working with Managed Files"
Multimedia	Multimedia file, any supported type	"Managing Multimedia Assets" on page 312
Collection	Collection	"Collections" on page 634
Menu	Menu	"Menu Feature" on page 712

View Menu

The View Menu provides the following functions.

Menu Option	Function	For more information, see
All types	Displays *all* content types of selected language.	

Menu Option	Function	For more information, see
• HTML content • HTML Form/Survey • Office Documents • Managed Files • Multimedia	Limits folder display to *selected content type*. For example, choose **View > Office Documents**, and see only Office Documents in the folder -- other content types are suppressed. This is especially helpful if the folder has a lot of items, and you are looking for only one type of content.	• "Adding Content" on page 79 • "Managing HTML Forms" on page 292 • **Ektron CMS400.NET** User Manual Section "Using the Document Management Functionality" > "Working with Microsoft Office Documents" • **Ektron CMS400.NET** User Manual Section "Using the Document Management Functionality" > "Working with Managed Files" • "Managing Multimedia Assets" on page 312
Language	Limits display within a folder to one language. The language setting also determines the language of any new items you create in the folder.	
Menus	Lets user view and work with menus	Ektron CMS400.NET User Manual section "Working with Menus" > "Adding a New Menu" "Adding a New Menu" > "Adding a Menu via Content Folder"
Collections	Lets user view and work with Collection	"Collections" on page 634
Archived Content	Lets user view and work with Archived content. That is, content that passed its scheduled End Date and whose archive option is either **Archive and remove from site** or **Archive and remain on Site**.	Ektron CMS400.NET User Manual section "Scheduling Content to Begin and End" > "Setting Archive Options"
Folder Properties	Lets user view and edit a folder's properties. In the properties screens, you can set permissions, approvals, etc.	"Folder Properties" on page 41

Delete Menu

This menu lets you perform the following functions.

.

Menu option	Lets you	More Information
Delete this folder	Delete current folder and all of its content	"Deleting Folders" on page 50
Delete content	Delete one, some, or all content items within folder	**Ektron CMS400.NET** User Manual section "Working with Folders and Content" > "Deleting Content"

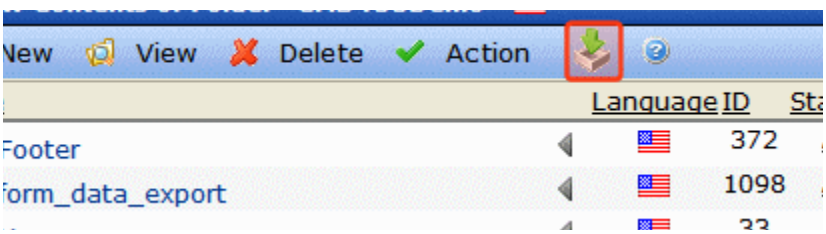
Action Menu

This menu lets you perform the following functions.

Menu option	Lets you	More Information
Export for translation	Prepare content for translation by a translation agency	"Using the Language Export Feature" on page 890
Move/Copy Content	Move or copy content to another folder.	"Moving or Copying Content" on page 84
Search	Search through content in the Workarea.	"Search Content Folder" on page 68

Add Assets Button

Click this button to enable a screen into which users can drag and drop assets. For more information, see the **Ektron CMS400.NET** User Manual Section "Using the Document Management System" > "Adding Documents Using Drag and Drop."



Folder Properties

The folder properties screen lets you set permissions and approvals for a folder. You can also assign or modify the folder's metadata, Web Alerts, and Smart Forms.

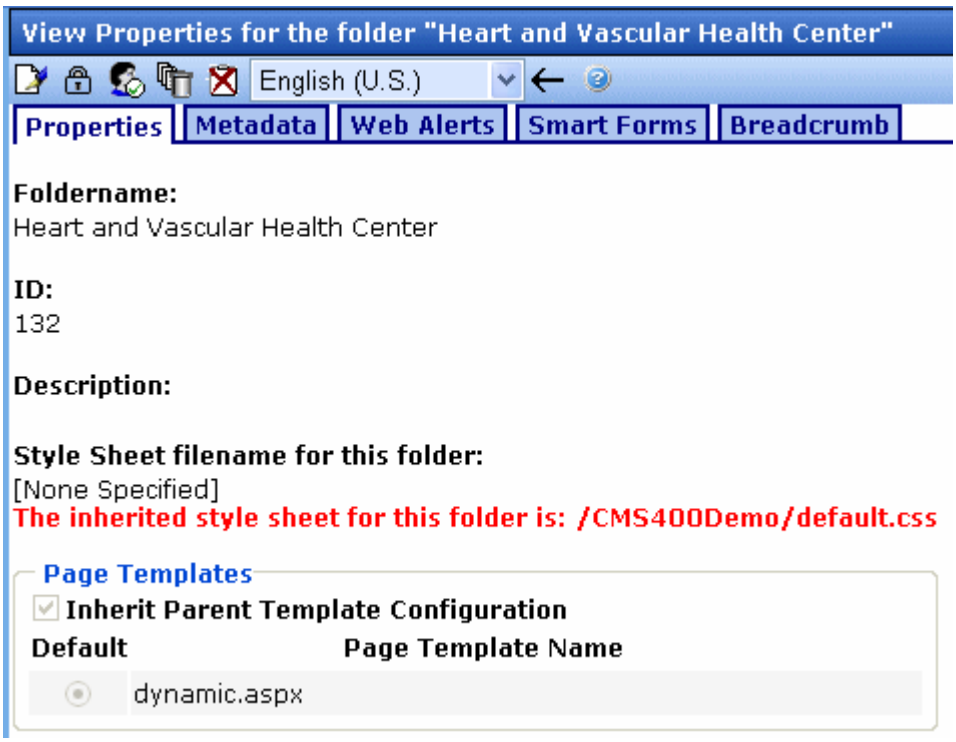
NOTE Only members of the Administrator User Group and those defined in the Manage Members for Role: Folder User Admin screen can view, add, or edit folder properties. (*See Also:* "Defining Roles" on page 795) In addition, if a user is not a member of the Administrators group, he must be given permission for individual folders on the Folder Properties > View Permissions for Folder screen. (*See Also:* "Setting Permissions" on page 776)

NOTE If you are using an eCommerce catalog, see "Product Types" on page 1164 for a description of the Product Types screen.

Accessing the Folder Properties Screen

To access the folder properties screen, follow these steps.

1. Click **View > Folder Properties**.
2. The folder's View Properties screen appears.

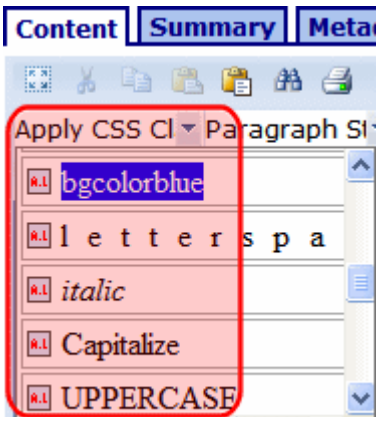


If you want to change any properties, click the Edit button ( ) to proceed to the edit screen.

The table below describes the fields on the Folder Properties screen.

Fields on the Folder Properties Screen

Field	Description
Foldername	Edit the name of the content folder. Note: You cannot change the root folder name.
Description	Edit the description of the content folder.

Field	Description
Style Sheet filename for this folder: (leave blank to inherit)	Specify a style sheet that defines styles that may be applied to content in this folder. The style sheet that you identify must reside in the site root folder. Or, leave this field blank to inherit the parent folder's style sheet. The style sheet populates the style dropdown list (see below) within the editor.  Note: This style sheet affects content being edited. It does not necessarily affect the content's appearance on your Web site. To set or edit the style sheet that determines your Web pages' appearance, open the page's Web form and place a `<link rel="stylesheet"...` tag within its `<HEAD>` tags. If desired, you can identify the same style sheet in both locations. To include user-selectable styles, they must be generic classes. **Caption and Visible Properties** eWebEdit400 ignores the CSS custom properties `caption` and `visible`. To address this problem for the Internet Explorer browser, replace them with the custom CSS properties `localeRef, caption` and `visible`. For other browsers, use the custom CSS selectors `localeRef` and `unselectable` (same as `visible: false`). To achieve cross-browser compatibility, use both approaches. Note: Non-IE browsers have no equivalent for `caption`.
Page Templates	Lets you specify one or more templates for content in this folder. This folder's content uses the specified template when appearing on your Web site. *See Also:* "Inheritance of Folder Templates" on page 75

Field	Description
Inherit Parent Template Configuration	Check this box to inherit the template from the parent content folder. Or, do not check this box and specify one or more templates below. *See Also:* "Inheritance of Folder Templates" on page 75
Taxonomy	• If you want this folder to inherit taxonomy configurations from the parent folder, check **Inherit Parent Taxonomy Configuration**. If you uncheck **Inherit Parent Taxonomy Configuration**, you can then select taxonomies that can be applied to content in this folder. • If you want all content in this folder to be assigned at least one taxonomy category, check **Required at least one category selection**. *See Also:* "Inheriting Taxonomies from a Parent Folder" on page 662; "Taxonomy" on page 642
Flagging	Check this box if content in this folder inherits a flagging definition from its parent folder. If you do not check the box, use the dropdown list to apply a flagging definition to content in this folder. *See Also:* "Flagging" on page 972, "Assigning a Flagging Definition to a Folder" on page 975
Multi-site Domain Configuration Note: Only appears for Site folders.	Lets you set up and manage several Web sites under one CMS. *See Also:* "Multi-Site Support" on page 1006.
Should Office documents added to this folder be published in other format? Note: This field only appears if the **Enable Office documents to be published in other format** property is checked in the Settings > Configuration > Setup screen. *See Also:* "Updating Setup Information" on page 24	**Publish Office documents as PDF** Check this option if Office documents in this folder are published as PDF files. *See Also:* "PDF Generation" on page 319 Note: This property is not inherited from a parent folder, nor is it inherited by any subfolders below this folder.

Tabs on the Folder Properties Screen

Tab	For more information, see
Metadata	"Assigning Metadata to a Folder" on page 141
Web Alerts	"Assigning Web Alert Information to Folders and Content" on page 1046
Smart Forms	"Smart Forms" on page 57
Breadcrumb	"Breadcrumbs" on page 59
Product Types (only appears with eCommerce folder)	"Product Types" on page 1164

Folder Properties Toolbar

The Folder Properties screen contains these toolbar buttons.

Button	Name	Description	More Information
	Edit Properties	Access the Edit Folder Properties screen	"Editing Folder Properties" on page 47
	Permissions	Access the folder's Permissions Table	"Setting Permissions" on page 776
	Modify Preapproval Group	Set or update preapproval group assigned to folder	"Automatic Creation of Tasks Associated with Content" on page 371
	Approvals	Access the folder's approvals table	"Setting Approval Chains" on page 786
	Purge History	Access the folder's purge history table	"Purge History" on page 56

Button	Name	Description	More Information
	Restore Web Alert Inheritance	Assigns the folder's Web Alert properties to all content in folder	"Inheriting Content-Level Web Alert Information from Its Folder" on page 1053
	Back	Go to previous screen	

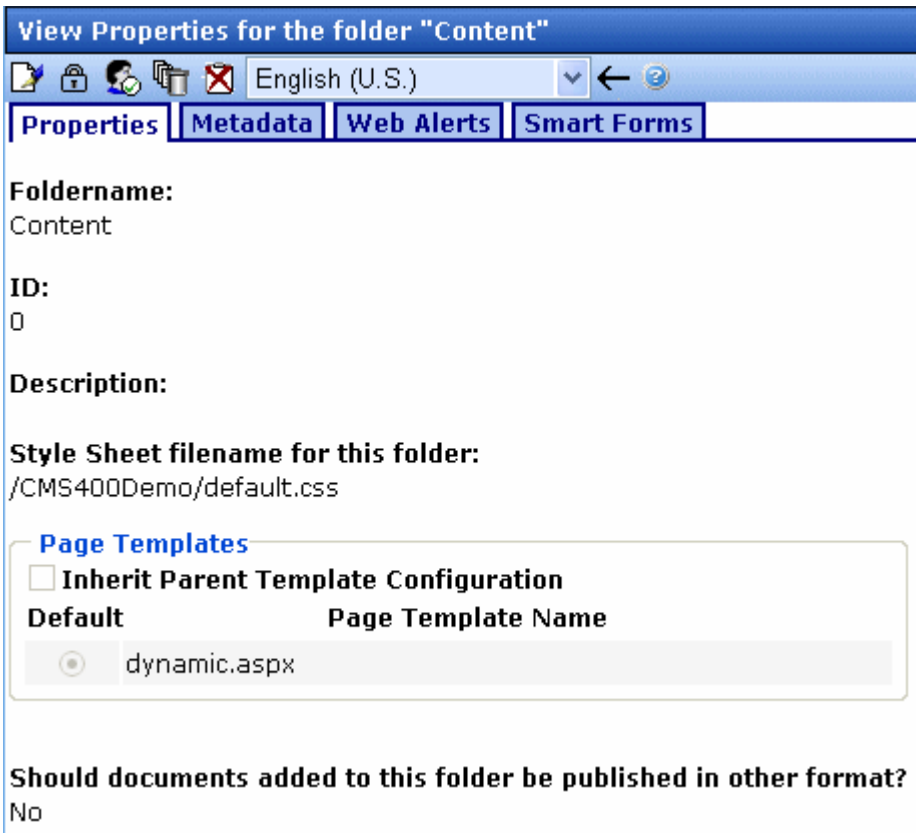
Editing Folder Properties

A content folder's properties consist of

- name
- description
- style sheet
- template (*See Also:* "Creating/Updating Templates" on page 70)
- Metadata (See "Assigning Metadata to a Folder" on page 141)
- Web Alerts (see "Assigning Web Alert Information to Folders and Content" on page 1046)
- "Smart Forms" on page 57
- "Breadcrumbs" on page 59

To edit any properties for a folder, follow these steps.

1. Access the View Properties screen for the folder you want to edit, as described in "Accessing the Folder Properties Screen" on page 41.
2. Click the Edit button ( ).
3. The folder's Edit Properties screen appears.

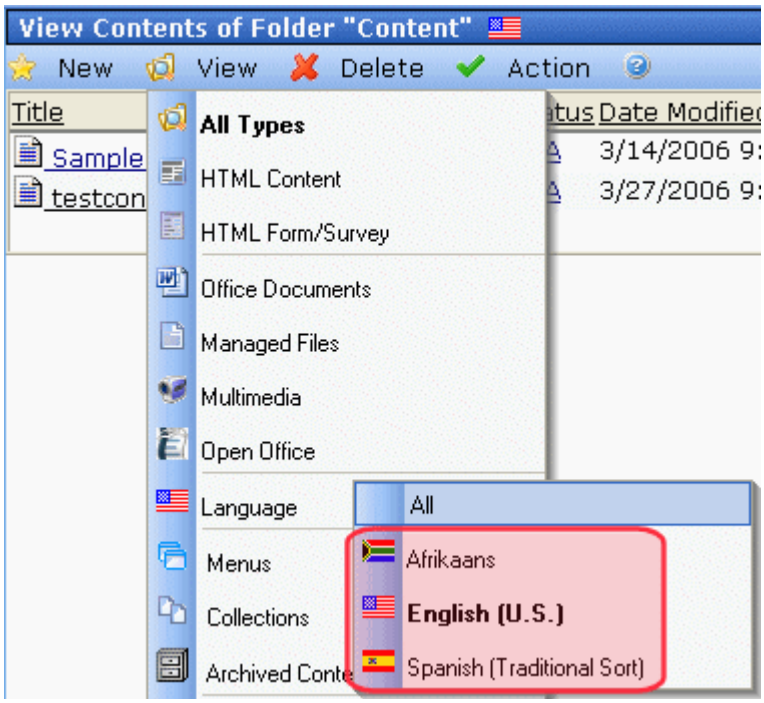


4. Make the necessary changes to the content folder's properties. See "Fields on the Folder Properties Screen" on page 43.
5. Click the Update button ( ).

Adding Subfolders

To further organize content on your Web site, create subfolders to store related content. To add a sub folder, follow these steps.

1. Navigate to and click the folder within which you want to create a subfolder (that is, the parent folder).
2. Each folder has a default language. By default, it is inherited from its parent folder. To change a folder's default language, use the parent folder's **View > Language** selection (shown below).



Effect of a Folder's Default Language

By default, when a user adds content to a folder, the default language is applied to the content unless the user explicitly changes the language. So, you should select a default language in which you expect the majority of folder's content to be created.

3. Click **New > Folder**.
4. The Add a Subfolder screen appears.
5. Complete the fields. See "Fields on the Folder Properties Screen" on page 43.
6. Click the Save button ( ).

You can modify the subfolder's properties, permissions, approval chain, etc. For a list of options, see "Folder Properties Toolbar" on page 46.

If this is a Community Folder, see "Community Folders" on page 50.

If this is a Site Folder, see "Multi-Site Support" on page 1006.

Deleting Folders

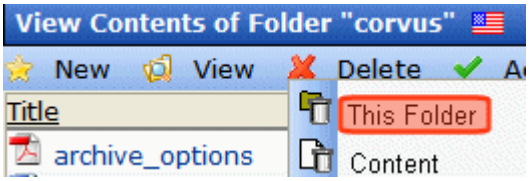
You can delete obsolete folders from the Ektron CMS400.NET Web site.

NOTE The top-level folder, **Root**, cannot be deleted nor renamed.

CAUTION! Deleting a content folder permanently deletes the content and Quicklinks that belong to the content folder, as well as its subfolders.

To delete a content folder, follow these steps.

1. In the Workarea, navigate to the content folder you want to delete.
2. From the options across the top of the screen, click **Delete > This Folder**.



3. A confirmation message is displayed.
4. Click **OK**.

Community Folders

Community folders resemble regular folders in most ways. The only difference is that membership users can add and edit content in these folders only. Community folders have a unique icon, which looks like two houses ( ).

Membership users add and edit Community folder content after signing in to the Web site. They do not use the Workarea to add or edit content.

NOTE Authorized CMS users can also create and update Community folder content.

Creating a Community Folder

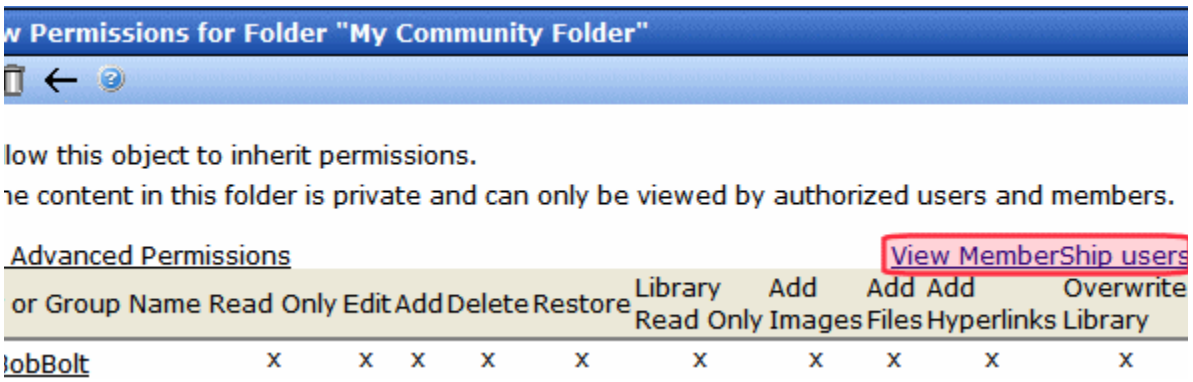
1. In **Workarea > Content**, go to the folder in which you want to create the community folder.
2. Select **New > Community Folder**.
3. Assign properties as you would any other folder. See "Folder Properties" on page 41

NOTE The folder properties screen lets you require metadata for any content item. However, membership users cannot enter metadata. Therefore, this requirement is ignored when membership users edit community folder content. If an Ektron CMS400.NET user tries to edit that content, he is required to enter a metadata value.

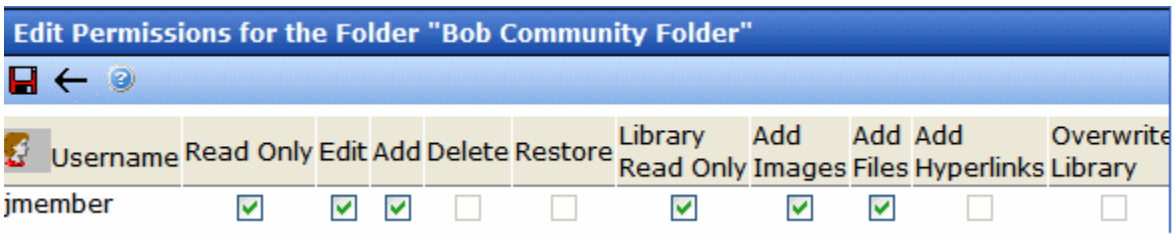
Assigning Permissions for a Community Folder

Since Community folders are intended for membership users, this section explains how to assign permissions for them. To assign folder permissions for regular users, see "Setting Permissions" on page 776.

1. Navigate to the folder.
2. Click **View > Folder Properties**.
3. Click the View Permissions button ( ).
4. If necessary, uncheck the **Allow this object to inherit permissions** checkbox.
5. Click **View Membership Users**.

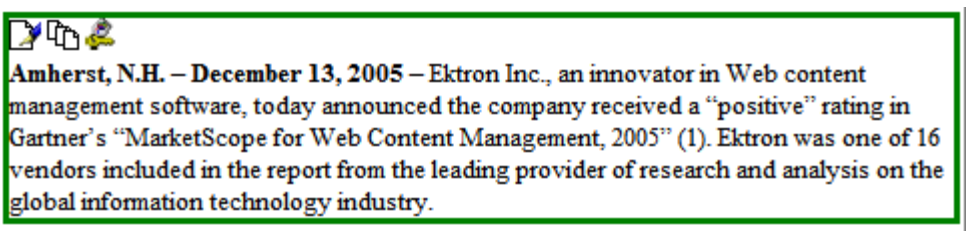

w Permissions for Folder "My Community Folder"
low this object to inherit permissions.
ıe content in this folder is private and can only be viewed by authorized users and members.
Advanced Permissions
View MemberShip users
or Group Name Read Only Edit Add Delete Restore Library Read Only Add Images Add Files Add Hyperlinks Overwrite Library
lobBolt x x x x x x x x x x

6. Click the Add button ( ).
7. Select the membership user or group to which you want to assign permission for this folder.
8. Check the permission boxes as appropriate.



How a User Views and Edits Community Folder Content

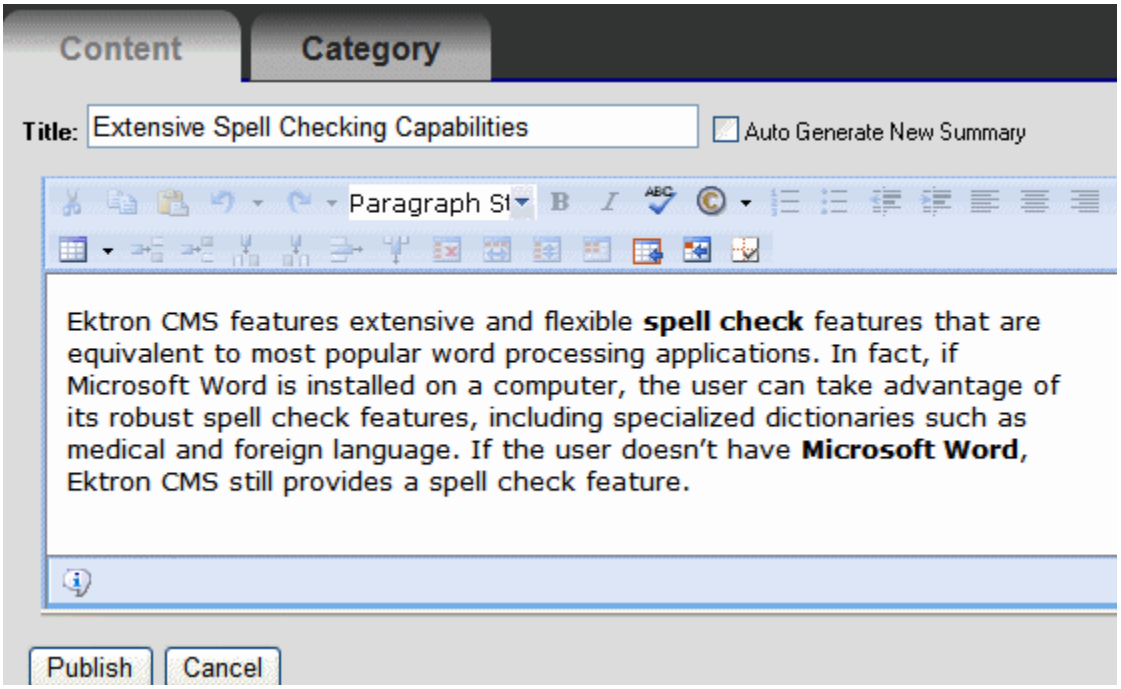
When a user with Read-only or higher permission navigates to a page whose content is in a community folder, he can view it. If he has edit permission, a green border surrounds it.


Amherst, N.H. – December 13, 2005 – Ektron Inc., an innovator in Web content management software, today announced the company received a "positive" rating in Gartner's "MarketScope for Web Content Management, 2005" (1). Ektron was one of 16 vendors included in the report from the leading provider of research and analysis on the global information technology industry.

IMPORTANT! Membership users can edit only HTML content and assets. They cannot edit other content types (HTML forms, Smart Forms, etc.).

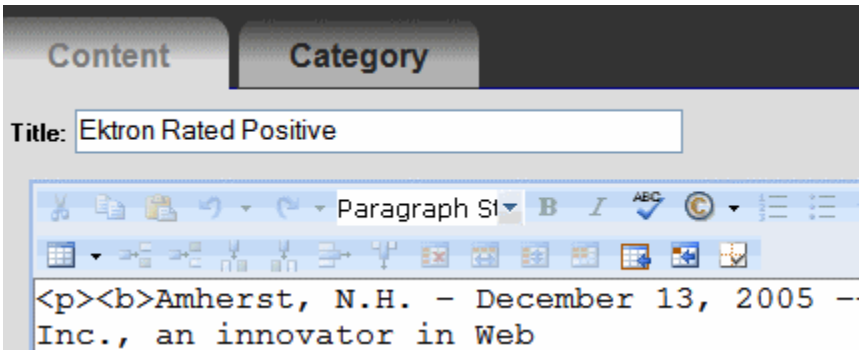
When a membership user clicks the Edit button ( ), a new window displays the content within an editor.

Other membership buttons are View History ( ) and Log out ( ).


Content
Category
Title:
Extensive Spell Checking Capabilities
Auto Generate New Summary
Paragraph St
Ektron CMS features extensive and flexible spell check features that are equivalent to most popular word processing applications. In fact, if Microsoft Word is installed on a computer, the user can take advantage of its robust spell check features, including specialized dictionaries such as medical and foreign language. If the user doesn't have Microsoft Word, Ektron CMS still provides a spell check feature.
Publish
Cancel

This editor has fewer capabilities than **Ektron CMS400.NET**'s editor. However, a membership user can

- add images and files via the library button ( ) if the membership user has **Add Images** and **Add Files** permission. *See Also:* "Library Folders and Permissions" on page 177
- add a wiki using the page link button ( ). *See Also:* **Ektron CMS400.NET** User Manual section "Introduction to eWebEditPro+XML" > "Using Ektron CMS400.NET's Wiki Feature"
- Assign a taxonomy category to the content by clicking the **Category** tab. *See Also:* "Taxonomy" on page 642



NOTE The **Category** tab only appears if a Taxonomy is applied to the content's folder.

- replace the content summary with the first 40 words of the content, using the **Auto Generate New Summary** check box. *See Also:* "Auto Generating Summaries" on page 80

When a membership user finishes editing, he clicks **Publish**. If the content's folder has an approval chain, the content's status changes to submitted, and the border color changes to yellow. If there is no approval chain, the content is published immediately.

How a Membership User Adds Community Folder Content

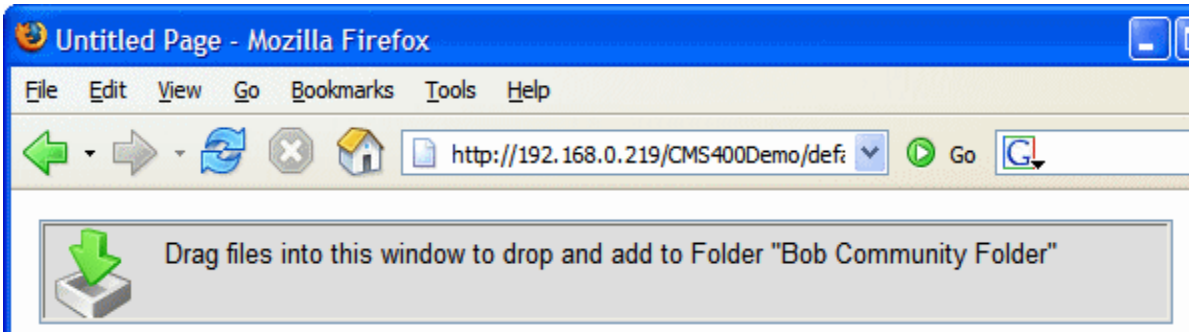
You will need the assistance of your developer to enable this feature. Instructions for doing so are in the developer sample site. To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`. After you install it, go to *`siteroot`*`/developer/ContentBlock/AddContentMembershipUser.aspx`.

Or, from the developer home page (*`siteroot`*`/developer/default.aspx`), go to **Memberships > Membership Add Content**.

How a Membership User Adds an Asset

First, your developer must create a template, then drop an Asset Server Control onto it. While adding the Asset Server Control, the developer specifies **Add** at the **Upload Type** property, and a community folder to which the asset will be saved at the **DefaultFolderID** property.

When a membership user authorized to add content navigates to the page with the server control, he sees an Asset control area like the one that appears when CMS users add assets. He can then drag and drop assets into **Ektron CMS400.NET**.


Untitled Page - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://192.168.0.219/CMS400Demo/defa
Go
Drag files into this window to drop and add to Folder "Bob Community Folder"

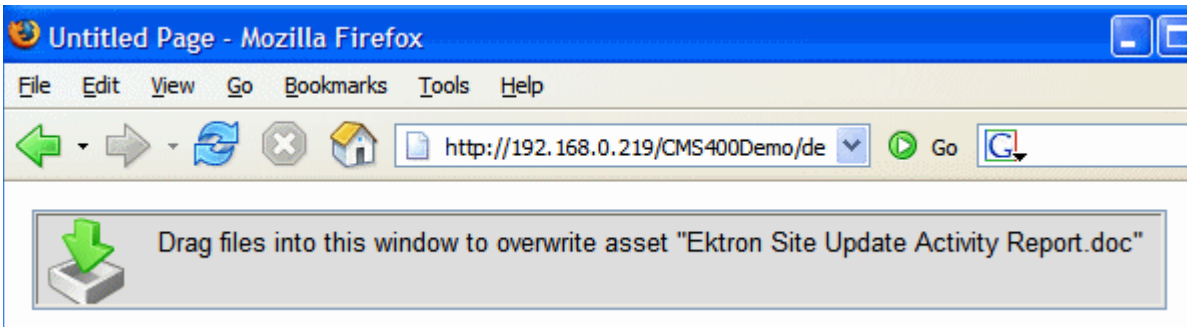
This is described in the **Ektron CMS400.NET** User Manual section "Using the Document Management Functionality" >"Importing Files via Drag and Drop."

Additional information about administering assets is found in the **Ektron CMS400.NET** User Manual section "Using the Document Management System."

How a Membership User Updates an Asset

Your developer adds the Asset Server Control, as described in "How a Membership User Adds an Asset" on page 54. The only difference is that the developer specifies **Update** at the **Upload Type** property, and a community folder to which the asset will be saved at the **DefaultFolderID** property.

Then, the developer specifies an asset ID number at the **DefaultAsset ID** property. Using that control, the membership user can update the identified asset only.


Untitled Page - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://192.168.0.219/CMS400Demo/de
Go
Drag files into this window to overwrite asset "Ektron Site Update Activity Report.doc"

Purge History

The Purge History option lets you delete historical versions of content in a folder. When purging, your options are

- specify a date before which historical versions are purged
- indicate whether the purge includes a folder's subfolders
- purge published as well as checked-in versions of content

NOTE Only Ektron CMS400.NET administrators and users identified on the Manage Members for Role: Folder User Admin screen can purge history.

To purge the history for a content folder, follow these steps.

1. Access the View Folder Properties screen for the content folder you want to purge the history for, as described in "Accessing the Folder Properties Screen" on page 41.
2. Click the Purge History button ( ).
3. The Purge History screen appears.
4. Use the following table to customize the Purge History options.

Field	Description	Required?
Only purge historical versions before	Specify a date to limit the number of historical versions to purge. When specified, only historical versions with a date before this date are purged.	Yes
Recursive Purge	Purges historical records for content in this folder's subfolders.	No

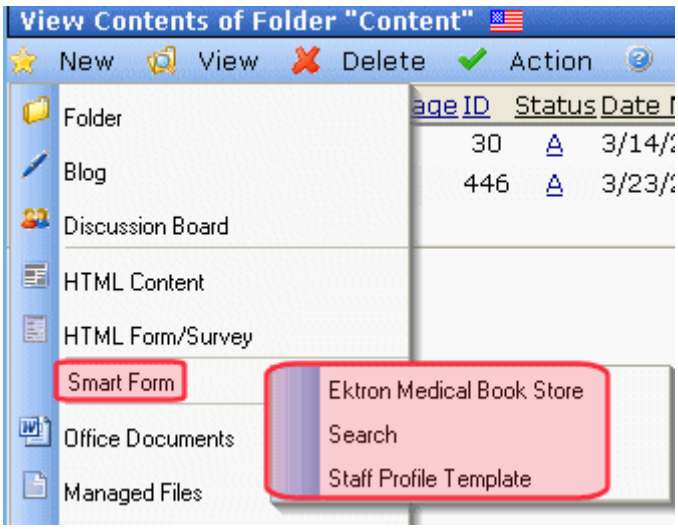
Field	Description	Required?
Purge versions marked as Published	Purges published versions of content as well as checked-in versions.	No

5. Click the Purge History button ( ).
6. A confirmation message is displayed.
7. Click **OK** to continue.
8. Ektron CMS400.NET executes the purge and displays a confirmation when complete.

Smart Forms

Use the Smart Forms screen to assign one or more XML configurations to a folder. (To learn about how Smart Forms are created, see "Working with Smart Forms" on page 181.)

When creating new content in a folder, the **New** menu provides a Smart Form option. This option displays a secondary menu, which lists Smart Forms that you can use to create XML content. (See graphic below.)



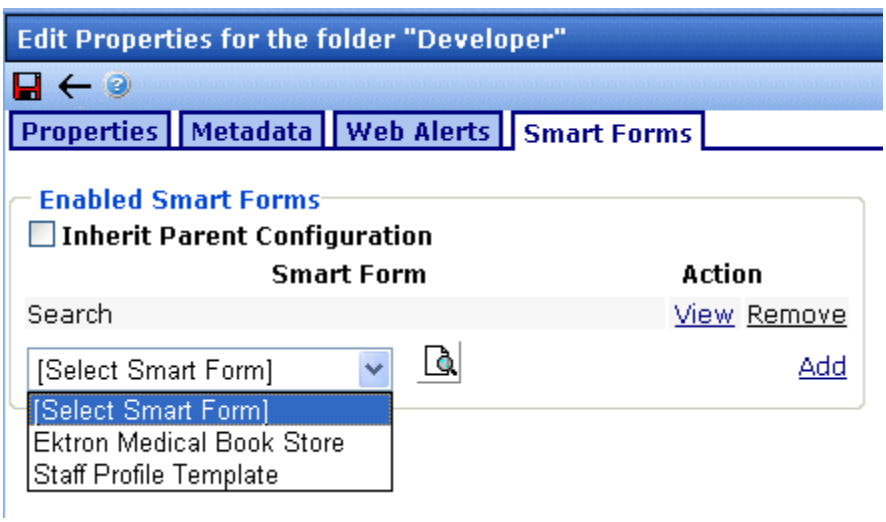
This section explains how to determine the list of Smart Forms available when creating content.

Inheritance and Smart Forms

A folder's Smart Forms can be inherited from the parent folder, or you can break inheritance and assign a unique group of Smart Forms. Use the **Inherit Parent Configuration** checkbox to retain or break inheritance.

Assigning Smart Forms to a Folder

If you break inheritance, you then select the Smart Forms that can be assigned to content in the folder using the Smart Forms dropdown list (shown below).

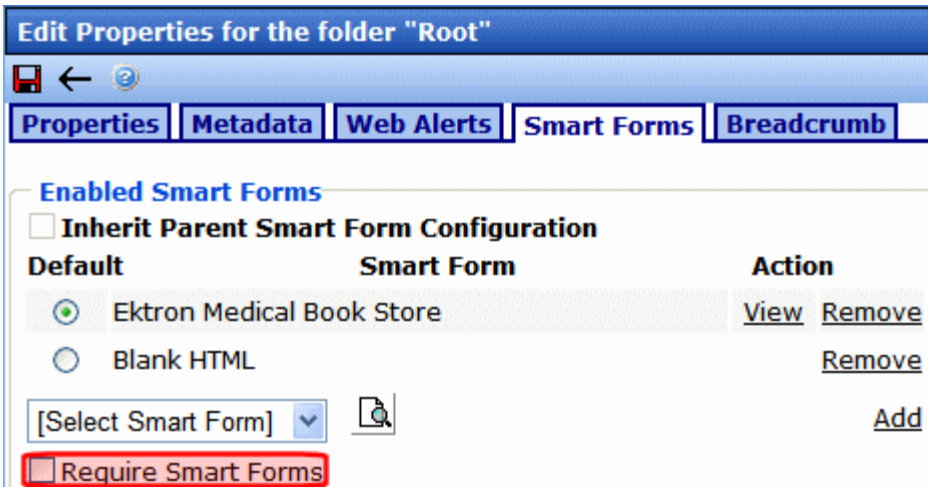


You can preview any Smart Form by clicking the Preview button ( ). To add any Smart Form, select it from the dropdown list and click **Add**.

To remove a Smart Form, click **Remove**.

Requiring Smart Forms

You can require a Smart Form to be the only type of content that can be added within a folder. To enable this, click the **Require Smart Forms** check box on the Smart Forms tab.



If you do, the user can only choose enabled Smart Forms when viewing that folder's **New** menu -- all other content types are suppressed.

Breadcrumbs

WARNING! The information described in this section is for use with the FolderBreadcrumb server control, *not* the BreadCrumb server control. For additional information on each server control, see The Developer Manual sections "**Introduction to Ektron CMS400.NET Server Controls"** > "**BreadCrumb Server Control**" and "**Introduction to Ektron CMS400.NET Server Controls**" > "**FolderBreadcrumb Server Control**".

Use the Breadcrumb tab to define a site map for the folder or to inherit one from the parent folder. Breadcrumbs improve the way site visitors can navigate around your site. Below is an example.

The following topics explain Breadcrumbs in more detail.

- ”Inheritance and Breadcrumbs” on page 60
- ”Adding a Breadcrumb” on page 60
- ”Reordering Breadcrumb Items” on page 63
- ”Editing a Breadcrumb Item” on page 65
- ”Removing a Breadcrumb Item” on page 67

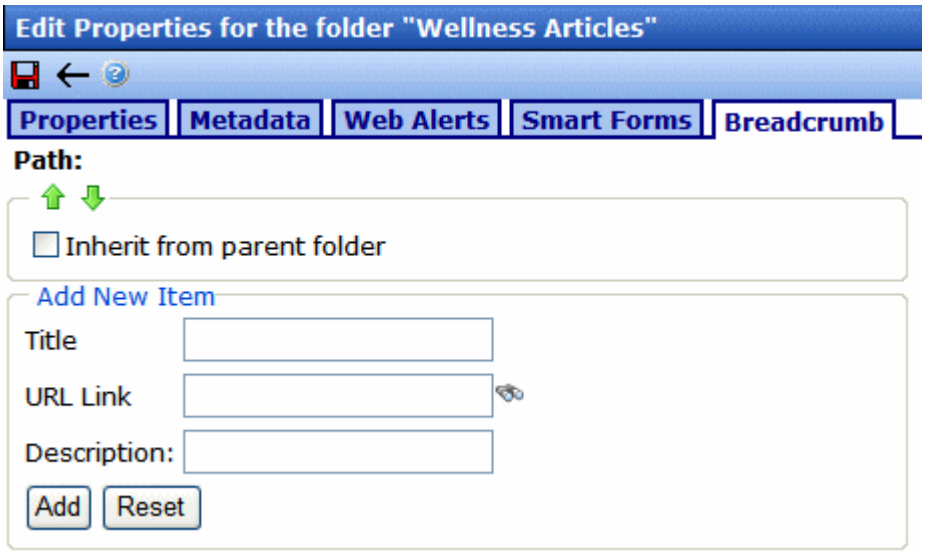
Inheritance and Breadcrumbs

A folder’s breadcrumbs can be inherited from the parent folder, or you can break inheritance and assign a path of breadcrumbs. Use the **Inherit Parent Configuration** checkbox to retain or break inheritance.

Adding a Breadcrumb

The example below adds three breadcrumbs to the trail.

1. Navigate to the folder for which you want to add the breadcrumbs.
2. On the View Contents of Folder screen, click **View** > **Folder Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.



6. In the **Add New Item** section of the screen, add the following information.

- **Title** - the name of the breadcrumb as you want it to appear in the breadcrumb trail
- **URL Link** - the URL path to the breadcrumb's destination, typically a **Ektron CMS400.NET** content item. For example, default.aspx.

  If you are not sure what the file's name is, click the Binoculars ( ), and the library for quicklinks appears. Select the content item to add to the breadcrumb.

  You can also enter a URL, for example, `www.example.com`.
- **Description** - add a description for the breadcrumb

7. Click the Add button (Add).
8. The first item in the breadcrumb path appears.

.

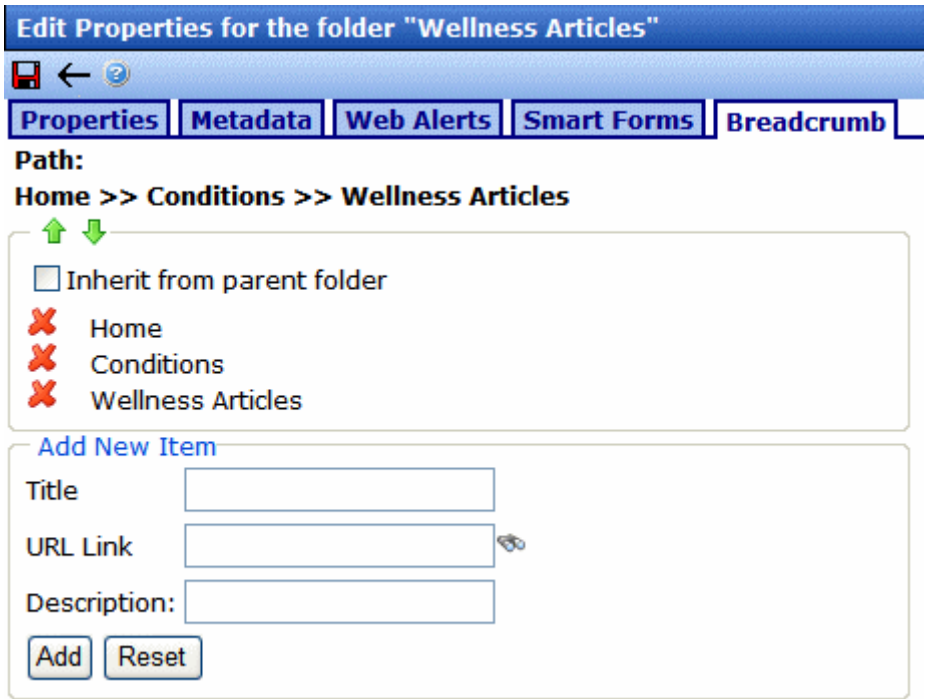
9. Repeat steps 6 and 7 for each item in the breadcrumb path.
10. The items in the breadcrumb now appear like this.

11. Click the Save button ( ).

Reordering Breadcrumb Items

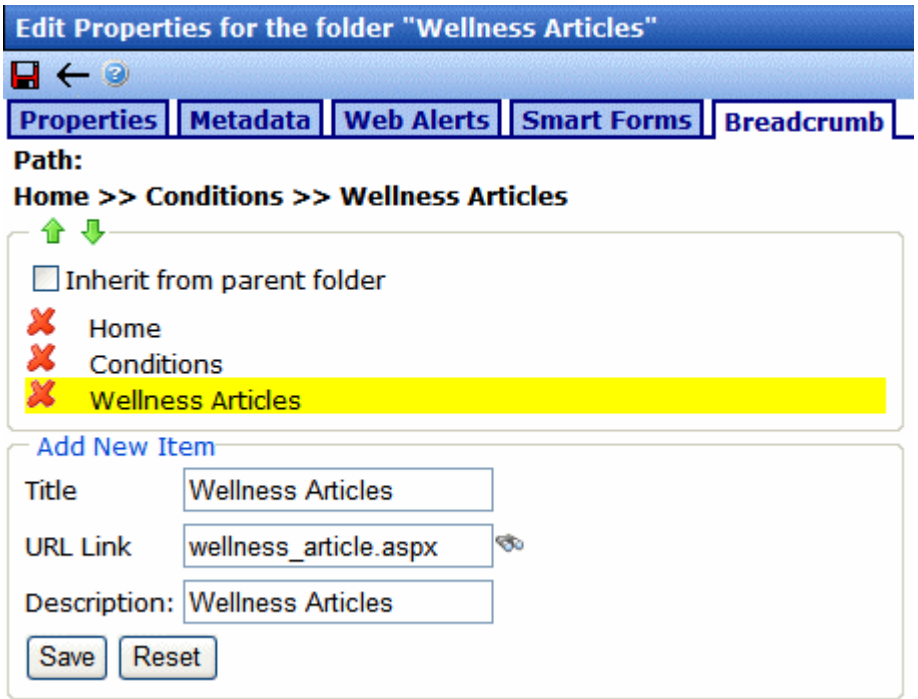
1. Navigate to the folder for which you want to reorder breadcrumbs.
2. On the View Contents of Folder screen, click **View > Folder Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.

.



6. Click a breadcrumb item.

WARNING! Do not click the red X. This deletes the breadcrumb item. *See Also:* "Removing a Breadcrumb Item" on page 67.

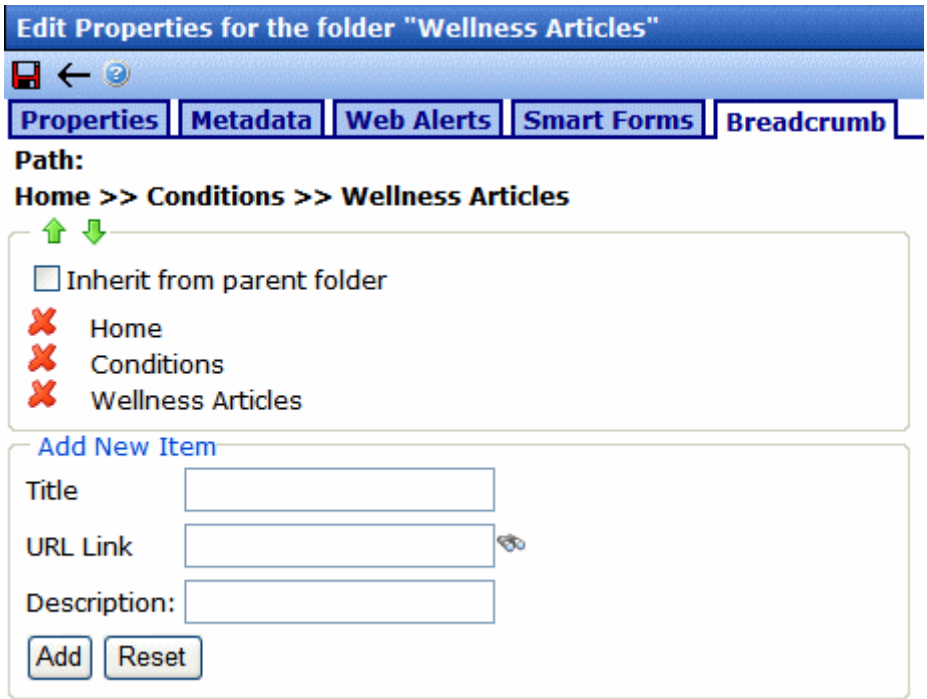


7. Click the green Up and Down buttons ( ) to move the item around in the list.
8. Once the items are in the correct position, click the Save button ( ).

Editing a Breadcrumb Item

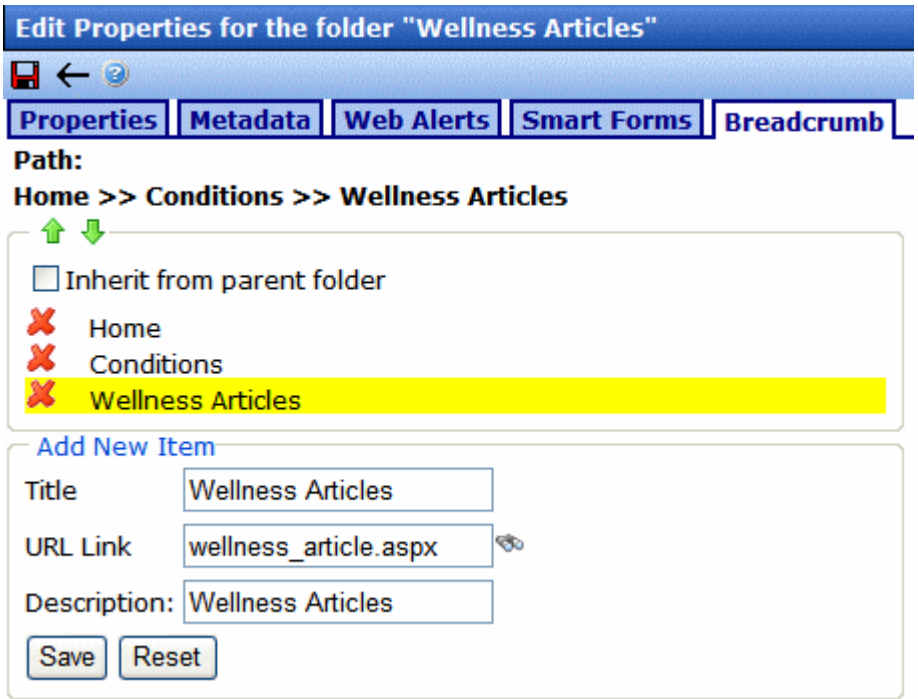
1. Navigate to the folder for which you want to edit breadcrumbs.
2. On the View Contents of Folder screen, click **View > Folder Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.

.



6. Click a breadcrumb item.

WARNING! Do not click the red X. This deletes the breadcrumb item. *See Also:* "Removing a Breadcrumb Item" on page 67.



7. In the **Add New Item** section, edit the information.
8. Click the Save button (Save).
9. Click the Save button ( ).

Removing a Breadcrumb Item

1. Navigate to the folder for which you want to remove a breadcrumb.
2. On the View Contents of Folder screen, click **View > Folder Properties**.
3. Click the Edit Properties button ( ).
4. Click the **Breadcrumb** tab.
5. The Edit Breadcrumbs screen appears.

.

6. Click the Red X ( ) next to the breadcrumb item you want to remove.
7. The breadcrumb item is deleted.
8. Click the Save button ( ).

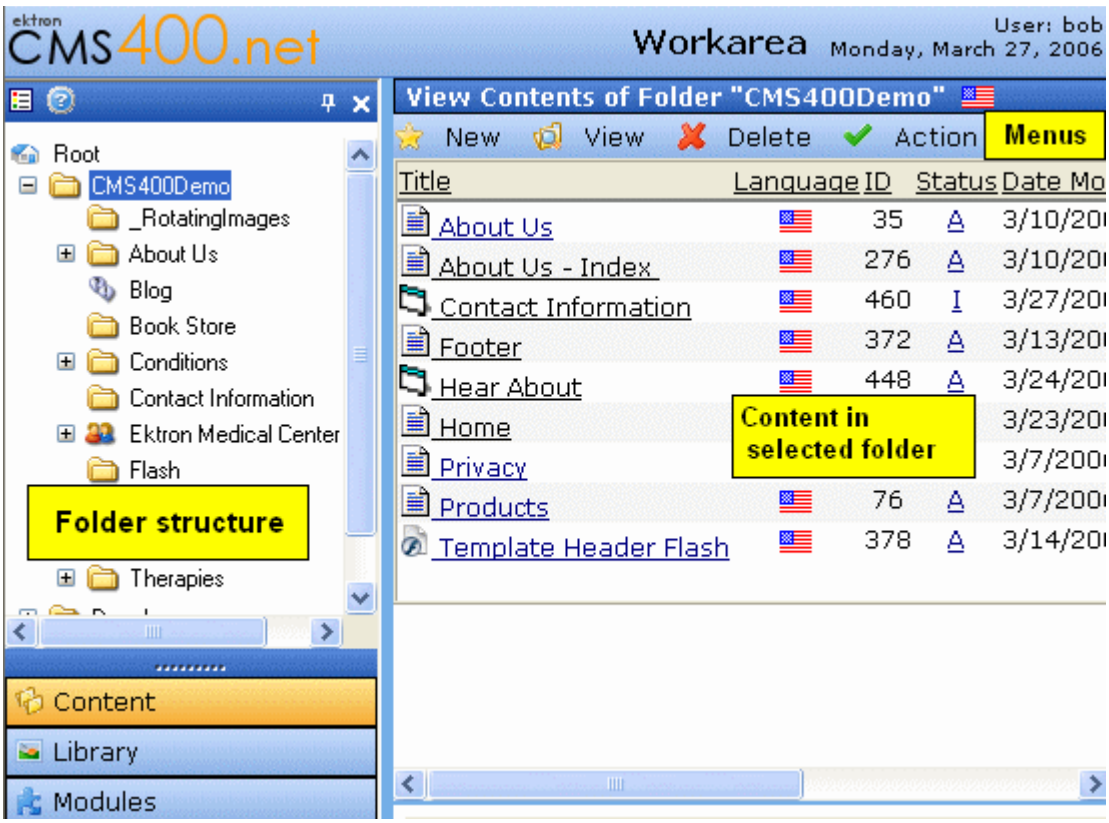
Search Content Folder

You can search a folder to locate content within your Web site. Use this feature to find content when you know the text that needs to be updated but are unsure of its folder or where it is on the Web site. The search only looks through the current folder and its subfolders. So if you want to search the entire site, begin with the root content folder.

To learn more about searching through folders on **Ektron CMS400.NET**, see “Searching the Workarea” in the **Ektron CMS400.NET** User Manual.

Managing HTML Content

When you enter the Content folder in Ektron CMS400.NET as an administrator, you can control every aspect of the content and folders. Some controls include setting permissions, approvals, and adding, editing, publishing, and deleting content. Below is an example of the Content folder.



TIP! The "Working with Folders and Content" chapter of the **Ektron CMS400.NET** User Manual explains many details about how users interact with content. You should familiarize yourself with that material before reading this chapter.

This chapter explains how to add, edit, publish, and delete content. Permissions and Approvals are explained in later chapters.

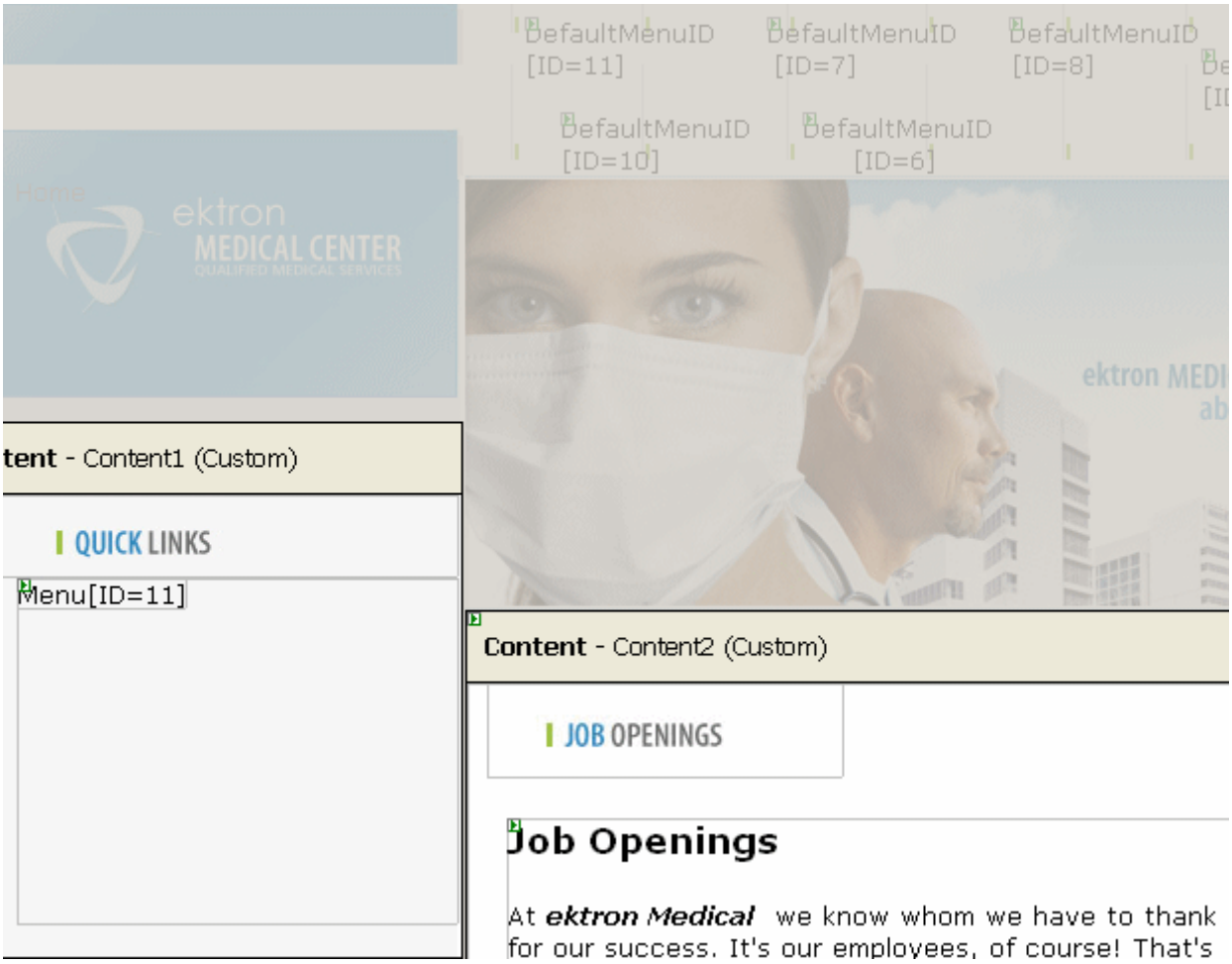
See Also:

- ”Creating/Updating Templates” on page 70
- ”Adding Content” on page 79
- ”Forming URLs For Ektron CMS400.NET Documents” on page 82
- ”Viewing Content” on page 83
- ”Editing Content” on page 84
- ”Moving or Copying Content” on page 84
- ”Viewing and Restoring Historical Versions of Content” on page 87
- ”Scheduling Content” on page 88
- ”Deleting Content” on page 88
- ”Content History” on page 88
- ”Content Permissions” on page 88
- ”Content Approvals” on page 88
- ”Content Workflow” on page 89
- ”Link Checking” on page 89
- ”Assigning Tasks to Content” on page 89
- ”Content Properties” on page 89
- ”Content Rating” on page 91

Creating/Updating Templates

During the setup of your **Ektron CMS400.NET** Web site, templates are created for your Web pages. A template typically includes page headers and footers as well as placeholders for content, forms, summaries, calendars, collections, or other page elements.

A template included with Ektron’s sample site appears below. Notice that the top of the screen contains headers that appear on several pages. Other areas contain links to **Ektron CMS400.NET** objects, such as menus and text. The developer can easily modify the content inside these areas.



NOTE To learn more about creating templates, see the **Ektron CMS400.NET** Developer's Manual section "Introduction to Ektron CMS400.NET Server Controls" > "Setting Up a Template." Another good resource is the Ektron technical article "Templating in CMS400.NET" (http://dev.ektron.com/articles.aspx?id=6724).

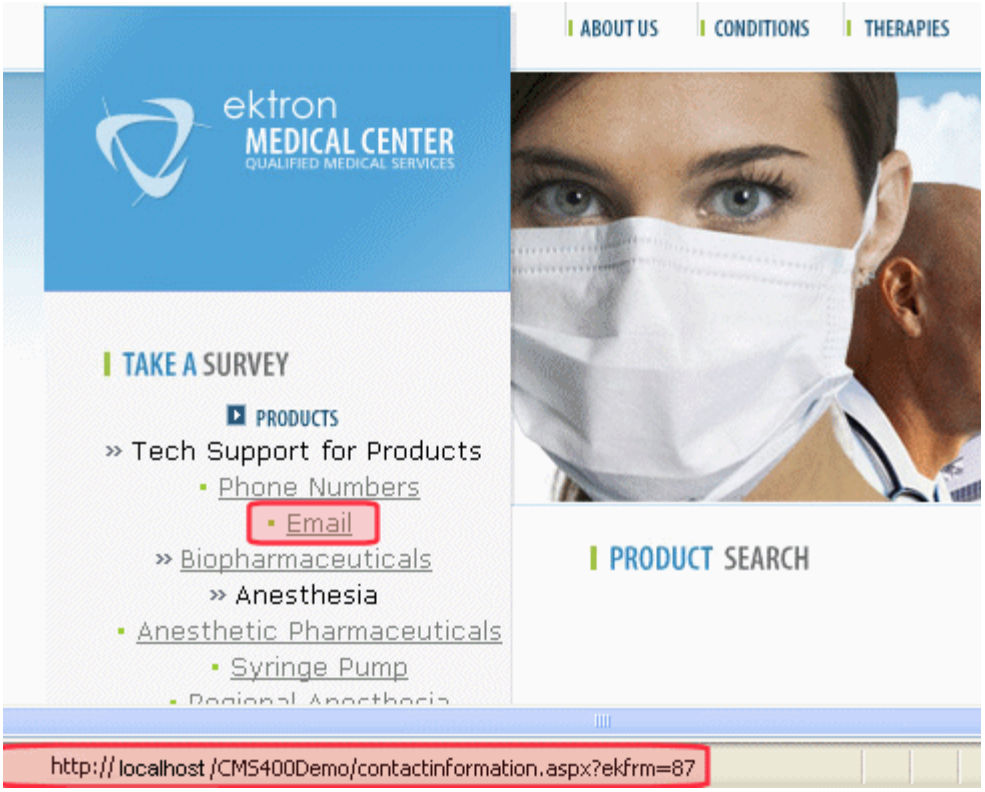
Templates are more fully explained through the following topics.

- "How Templates are Used" on page 72
- "Declaring Templates" on page 72
- "Inheritance of Folder Templates" on page 75
- "Assigning Templates to Folders" on page 76
- "Assigning Templates to Content" on page 77

How Templates are Used

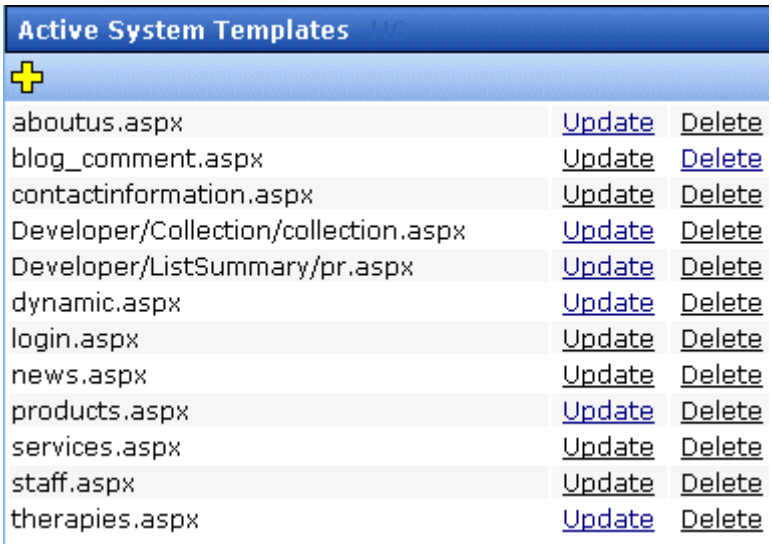
Except for your Web site's home page, all pages on your site are made accessible by *hyperlinks*. Hyperlinks can appear within content. They are also used to link content items from list summaries, menus, and collections.

The template is a key component of the hyperlink definition -- it defines the template in which to display the content. As seen in the example below, when the user selects **Email**, that content item (ID 87) will display within the `contactinformation.aspx` template.



Declaring Templates

After creating your templates, declare them within **Ektron CMS400.NET**. To do this, go to the Active System Templates screen, available from **Settings > Configuration > Template Configuration**.



From this screen, you can add new templates, or delete or update existing ones.

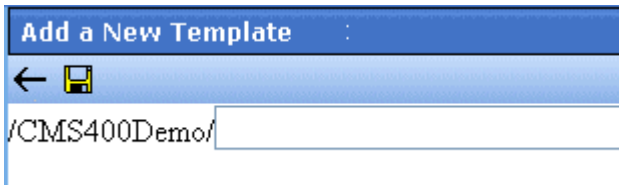
NOTE Only members of the Administrators group and users defined in the Manage Members for Role: Template Configuration screen have permission to add, delete or update templates. *See Also:* "Defining Roles" on page 795

See Also:

- "Creating/Updating Templates" on page 70
- "Adding a New Template" on page 73
- "Deleting a Template" on page 74
- "Updating a Template" on page 74

Adding a New Template

To add a new template, click the Add button ( ). The Add a New Template screen appears.



Enter the path to the new template and click the Save button ( ).

Deleting a Template

To delete a template, click Delete next to the template.

You can only delete a template if it is not assigned as any folder's default template. If you choose a template that is assigned as a default, a screen tells you why you cannot delete it and lists the folders for which it is the default.

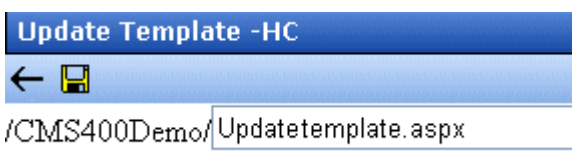
If you delete a template that is not used as a default but is applied to content, that content's template is changed to its folder's default template.

Updating a Template

Use the **update** command to change all references from an old to a new template. For example, your old template is named MyTemplate.aspx. You can want to replace all references to it to Updatetemplate.aspx.

To do this, follow these steps.

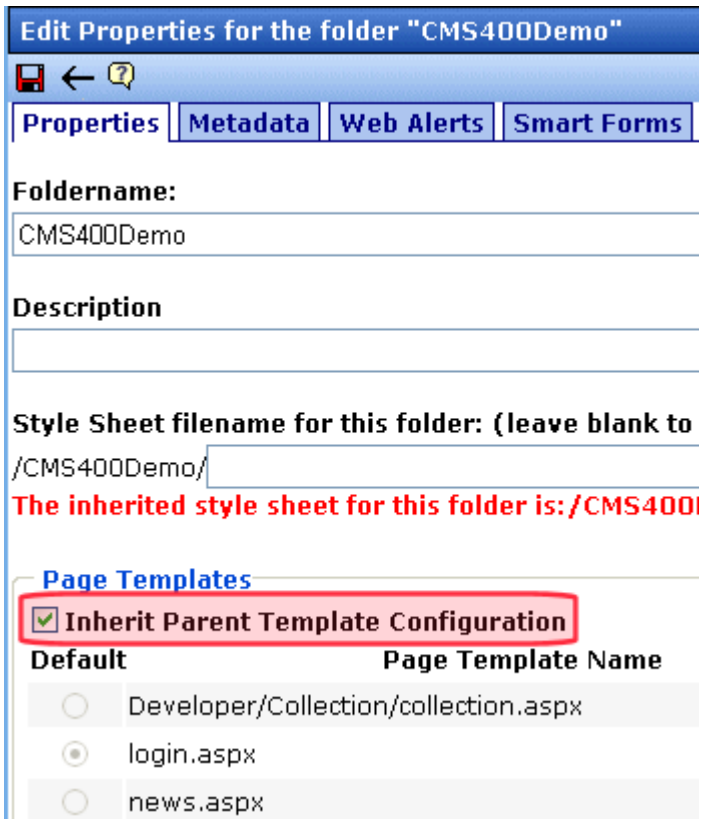
1. Click Update next to the template.
2. A new screen appears.
3. Enter **Updatetemplate.aspx**.
4. Click the Save button ( ).



Inheritance of Folder Templates

By default, all folders below the root folder inherit a template from their parent. However, you can override the default and assign a unique set of templates to any folder.

Before you can change a folder's template assignment, you must break inheritance from the parent folder. To do this, go to the Edit Folder Properties screen and uncheck the box next to **Inherit Parent Template Configuration** (illustrated below). *See Also:* "Editing Folder Properties" on page 47



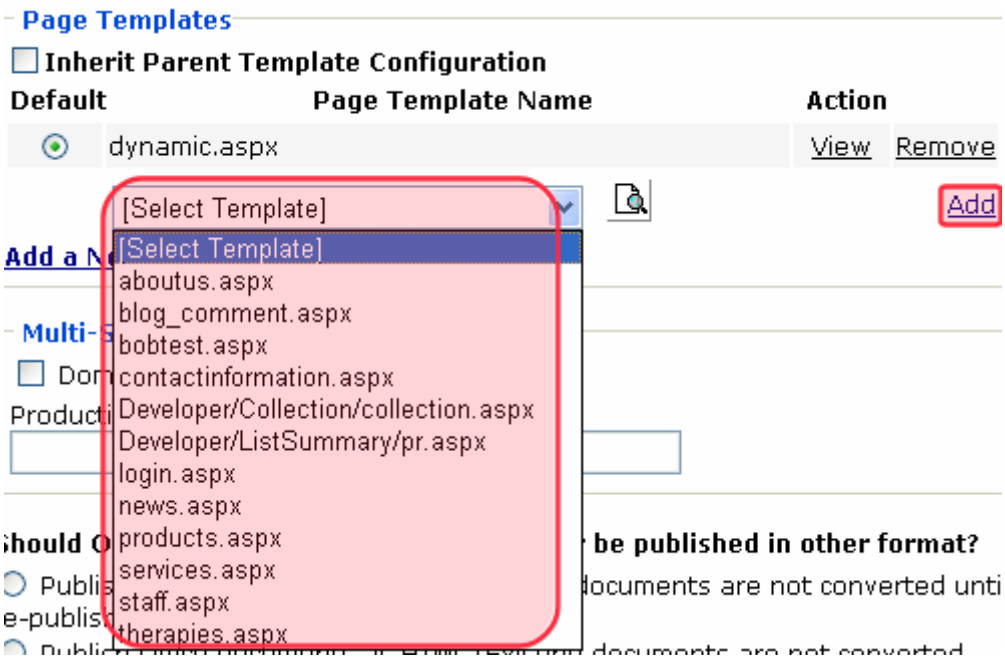
Each folder must have at least one template. Also, one template must be chosen as the default.

If the folder's default template is changed, all existing template assignments remain. However, any new content added or moved into the folder will assume the new default template.

Assigning Templates to Folders

If you break template inheritance, all inherited templates are initially assigned to the folder. You can then remove unwanted templates or add new ones.

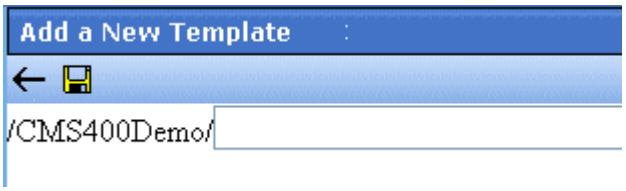
All available templates appear in the template dropdown list (illustrated below). Select any that you want to be available from the folder and click **Add**.



The list of available templates is managed through the ActIve System Templates screen. *See Also:* "Declaring Templates" on page 72

Adding a Template to a Folder

To add a new template, click the Add button ( ). The Add a New Template screen appears.



Enter the path to the new template and click the Save button ( ).

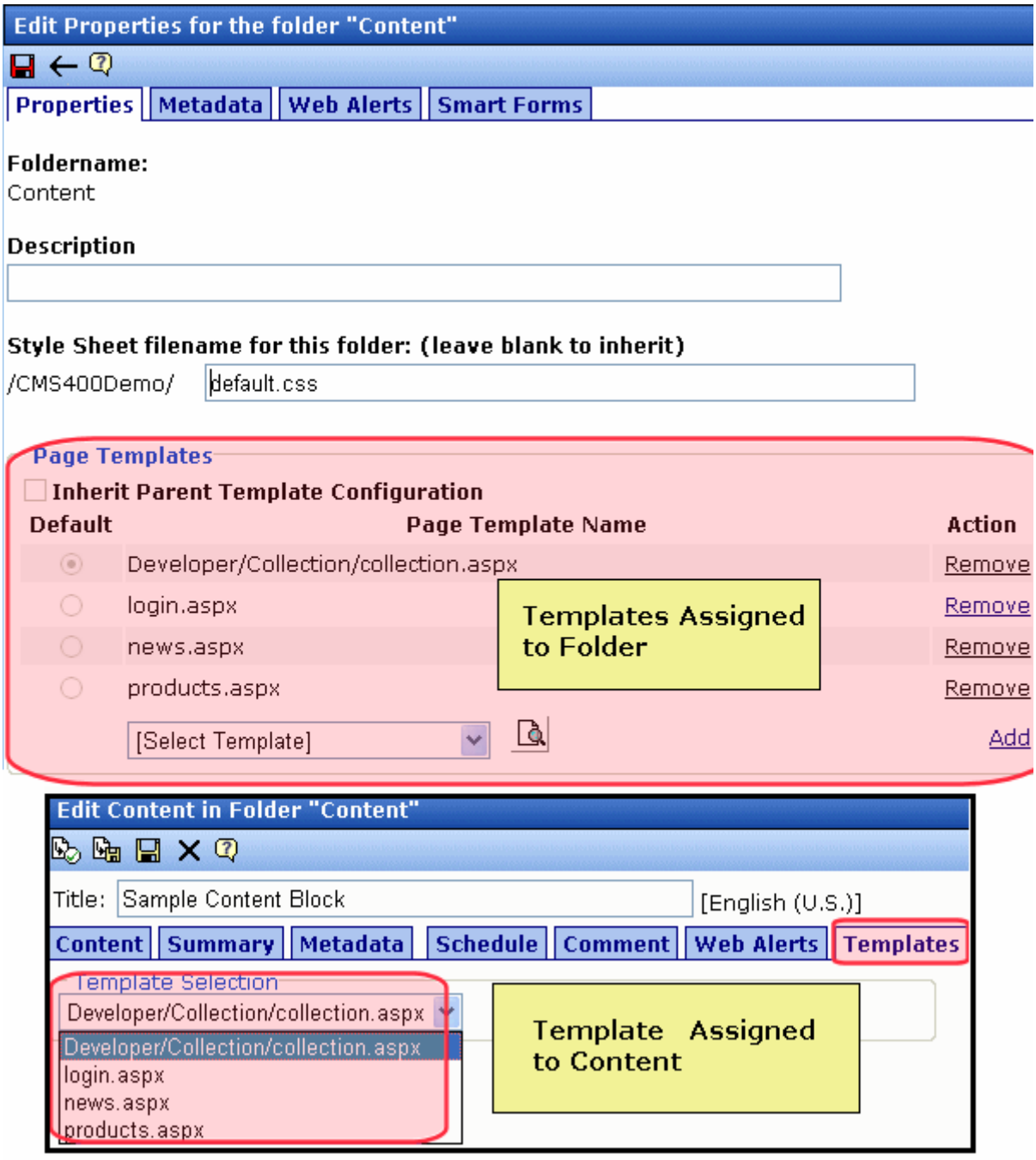
Removing a Template from a Folder

- If you try to delete a template that is the default for a folder, you are notified that you must assign a new default to that folder before you can delete it.
- If you try to delete a template that is assigned to a content block, you are notified via the following message **If you wish to continue and delete this template, the above content will be set to their parent folder's default template. Do you wish to continue?**

Assigning Templates to Content

A folder's default template is automatically applied to all content in the folder. However, you can change a content item's template to any of those assigned to the folder.

This relationship is illustrated below.


Edit Properties for the folder "Content"
Properties
Metadata
Web Alerts
Smart Forms
Foldername:
Content
Description
Style Sheet filename for this folder: (leave blank to inherit)
/CMS400Demo/
default.css
Page Templates
Inherit Parent Template Configuration
Default
Page Template Name
Action
Developer/Collection/collection.aspx
Remove
login.aspx
Remove
news.aspx
Remove
products.aspx
Remove
[Select Template]
Add
Templates Assigned to Folder
Edit Content in Folder "Content"
Title:
Sample Content Block
[English (U.S.)]
Content
Summary
Metadata
Schedule
Comment
Web Alerts
Templates
Template Selection
Developer/Collection/collection.aspx
Developer/Collection/collection.aspx
login.aspx
news.aspx
products.aspx
Template Assigned to Content

To change the template applied to a content item, edit that content, and go to the **Templates** tab as shown above. Then, select a template to apply to the content.

As explained in ”How Templates are Used” on page 72, the template assigned to the content will be used whenever a hyperlink is created to it.

See Also: ”Editing Content” on page 84

Adding Content

Ektron CMS400.NETallows for several types of content.

- **HTML** - Most typical type of Web content. User creates/edits this using WYSIWYG editor. Formatting is embedded as HTML code, which the user doesn’t need to see. *See Also:* ”Adding HTML Content” on page 80
- **HTML Form/Survey** - Users can create and maintain HTML forms to collect information and opinions from visitors to your Web site. *See Also:* **Ektron CMS400.NET** User Manual section “Working with HTML Forms”
- **Smart Forms** - Content created using an XML configuration. *See Also:* ”Adding XML Content” on page 81”Working with Smart Forms” on page 181
- **Multimedia Files** - Files that include audio, video, or both
- **Microsoft Office Documents** - Content created in Microsoft Office and stored in CMS400.NET via the Document Management functionality
- **Managed Files** - Content created with software external to the CMS and stored in CMS400.NET via the Document Management functionality. These files are typically .pdf, .gif, .jpeg, .zip, and .txt files.

  To learn about how Office documents and Managed files are added see the **Ektron CMS400.NET** User Manual section “Working with Folders and Content” > “Using the Document Management System”
- **PageBuilder Page** - a Web page on which you can drop *widgets*, which are containers that can hold

- **Ektron CMS400.NET** content and navigation tools, such as List Summaries and Metadata
- generic Web widgets, such as a calculator or weather report

For more information see the **Ektron CMS400.NET** Pagebuilder Quick Start Guide.

Adding HTML Content

See the **Ektron CMS400.NET** User Manual Section “Working with Folders and Content” > “Adding Content”.

Auto Generating Summaries

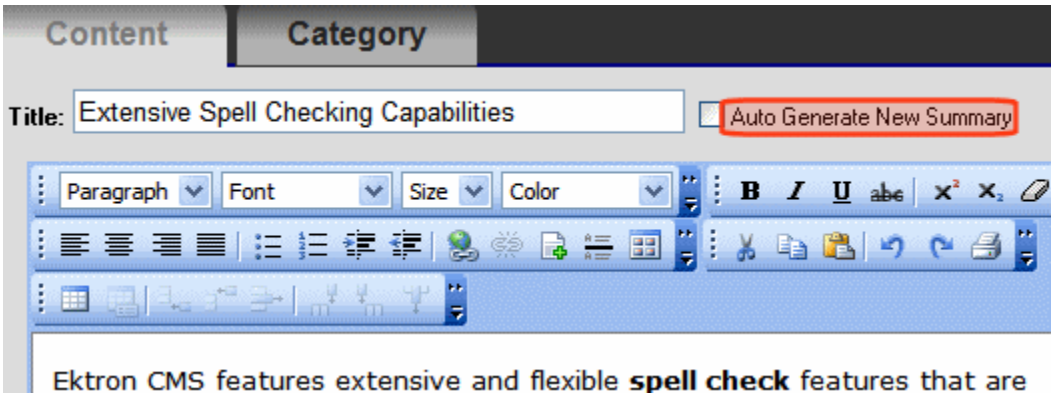
Ektron CMS400.NET automatically generates a new content item’s summary, if none exists. To do this, it checks the summary the first time new content is published. If the summary is blank, **Ektron CMS400.NET** copies the first 40 words of the content into the summary.

After the content is published, a CMS user can update or delete the summary. If it is deleted, the summary remains blank and is never again automatically generated for that content.

You can disable this feature in **Ektron CMS400.NET** if desired. See ”Automatically Recreating a Catalog” on page 396.

Membership User Summary Editing

If a membership user edits content and wants to update the summary, he can automatically copy the first 40 words of the content into the summary. To do this, the membership user checks the **Auto Generate New Summary** field on the membership editing screen (shown below).



There is no limit on the number of times a membership user can automatically generate a new summary.

Adding XML Content

If one or more Smart Forms are assigned to a content folder, users can create XML content within it. Any folder (other than the root content folder) can have a unique group of Smart Forms or inherit them from the parent folder. *See Also:* "Working with Smart Forms" on page 181

To add XML content, follow these steps.

1. In the Workarea, browse to a folder to which at least one Smart Form is assigned.
2. Click **New > Smart Form**.
3. Select the Smart Form you will use for the content.

NOTE When selecting the folder to create the content in, keep in mind the permissions that are going to be set on it, and which users will have permissions for it.

NOTE Depending on the Smart Form assigned to the content, the default XML may appear differently.

4. The procedure for creating XML content is similar to that for creating HTML content. Follow the steps described in "Adding HTML Content" on page 80.

The Smart Form formats the screen display. When that content is published and a site visitor completes the screen, the user's input

is saved as XML. For more information, see "Working with Smart Forms" on page 181.

Forming URLs For Ektron CMS400.NET Documents

Whenever content is created, **Ektron CMS400.NET** generates a unique identifier of that content. *See Also:* **Ektron CMS400.NET** User Manual > "Library Folder" > "Quicklinks and Forms"

The identifier for Ektron CMS400.NET content is made up of these elements:

- Site address

WARNING!

- "The Template" on page 82
- "The Content Variable" on page 83
- "The Language Identifier" on page 83

Only use the language identifier if you are forcing or changing the language.

The Template

The template determines much of the page layout. By itself, the template URL retrieves the empty template or the template with its default document.

NOTE You can set a default document for a template in the content function by inserting an id number.

See Also: "Creating/Updating Templates" on page 70

The Content Variable

A question mark (?) separates the template URL from the content variable. The content variable indicates which document or content the server places in the template before displaying the page. Below is a description of the URL format.

Content variable	Example	Description
ID=n	`http://www.example.com / index.aspx?ID=1`	ID selects a single document to display. Use this variable for a single document template type. The value corresponds to the content's id value.

The above variable's name is based on the templates included in the Ektron CMS400.NET's sample site. If your Web master changed the variable names in your site's template, use the name of the corresponding variable in each template rather than the one above.

The Language Identifier

This part of the URL identifies the language selected by a visitor to your site. It only appears if your site supports multiple languages.

WARNING! Only use the language identifier if you are forcing or changing the language.

To learn more, see "Multi-Language Support" on page 876.

Viewing Content

See the **Ektron CMS400.NET** User Manual Section "Working with Folders and Content" > "Viewing Content".

NOTE You can use the `ek_PageSize` setting in the web.config file to determine the maximum number of items that can appear on a page before it "breaks." When a page breaks, additional entries appear on another screen, and the following text appears near the bottom of the items list:
Page 1 of 2
[First Page] [Previous Page] [Next Page] [Last Page]

Editing Content

See the **Ektron CMS400.NET** User Manual Section “Working with Folders and Content” > “Editing Content”.

Moving or Copying Content

You can *move* content from any folder to any other folder. Or, you can *copy* content from one folder to another. At the end of both procedures, a copy of the content resides in the new folder. Moved content retains the original ID number, while new content gets the next available ID number.

When copying, you *leave* the content in its original folder, while moving *deletes* the content from the original folder. Other than that difference, the procedure for performing both actions is virtually identical.

Who Can Move or Copy Content?

Only members of the Administrators user group or those assigned in the Roles > Folder User Admins screen can move or copy content. *See Also:* ”Defining Roles” on page 795 and ”Guidelines for Using The Folder-User Admin Role” on page 798

Impact of Content Status on Moving and Copying

Your ability to move and copy content is affected by the content’s status, as described in the table below.

Action	Content Status
Move	Approved, Checked in
Copy	Approved

What is Moved Or Copied?

When content is moved or copied, the following changes are made.

- The content inherits permissions and the approval chain from the new folder.
- The content's Quicklink is moved or copied in the library to the destination folder. However, the Quicklink remains the same (that is, the default template doesn't change). You can update this by editing the Quicklink. This procedure in described in the **Ektron CMS400.NET** User Manual section "Updating Default Template for Multiple Quicklinks."

NOTE If the Link Management setting in the web.config file is set to `true`, you do not need to update the quicklink. Link Management automatically finds the correct template based on the current content folder.

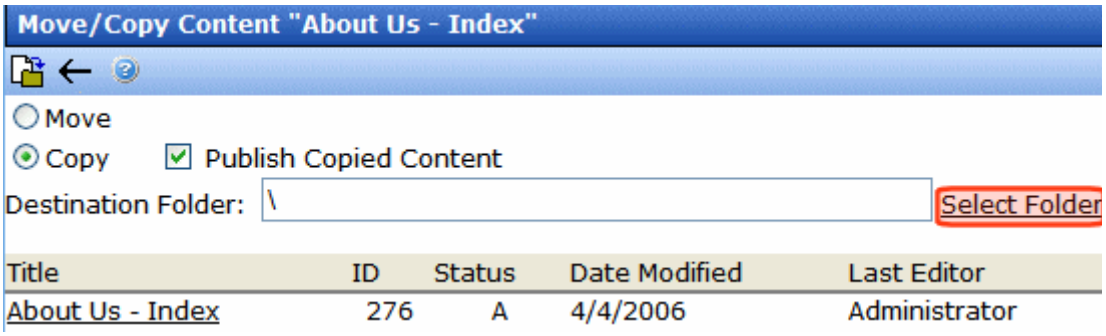
- If the new folder already contains content with the same title, **Ektron CMS400.NET** appends a number to the title to make it unique. For example: `ASP.NET Unleashed(2).`
- The new folder's default template is assigned to the content
- Library image paths inside the content remain the same
- If the content has a Smart Form, it remains assigned even if the Smart Form is not assigned to the new folder

Moving Or Copying One Content Item

To move or copy content to another folder, follow these steps.

1. Access the View Content screen for the content you want to move or copy, as described in the **Ektron CMS400.NET** User Manual section "Working with Folders and Content" > "Viewing Content."
2. Click the Move/Copy Content button ( ).
3. The Move/Copy Content screen is displayed.
4. Select either **Move** or **Copy**.
5. If you choose **Copy**, and you want the content to be published as soon as the copying is complete, check **Publish Copied Content**.

   If you want the content status in the new folder to be checked in, uncheck the **Publish Copied Content** checkbox.
6. Enter the path to the destination folder. If you don't know the path, click **Select Folder** and navigate to the destination folder.

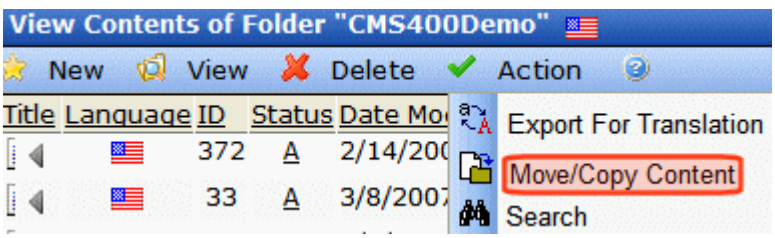


7. Click the Move/Copy Content button ( ).
8. A confirmation message is displayed.
9. Click **OK** to continue.
10. The content is moved or copied to the specified content folder. The destination folder appears with the new content.

Moving Or Copying Several Content Items

To move or copy several content items in the same folder at once, follow these steps.

1. Navigate to the folder that contains the content you want to move or copy.
2. Click **Action > Move/Copy Content**.



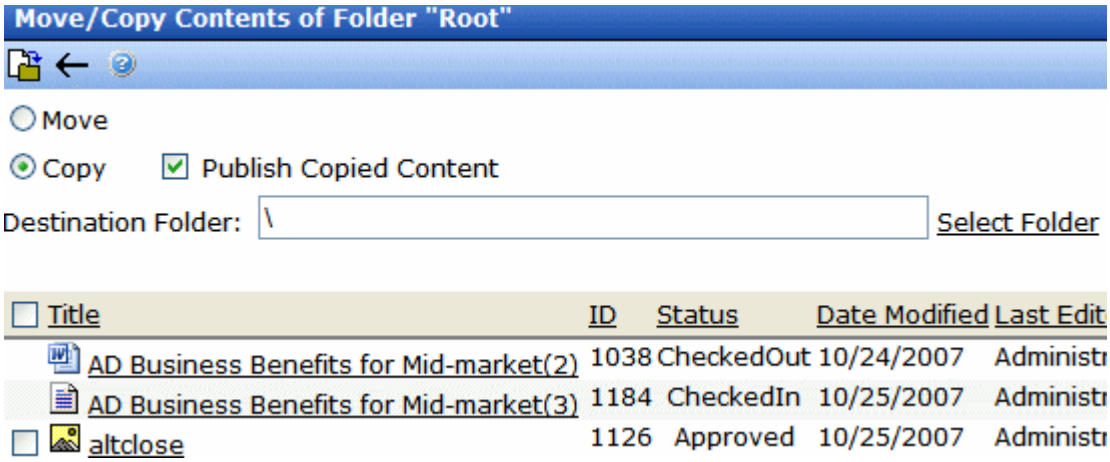
3. The Move/Copy Contents of Folder screen is displayed.
4. Select either **Move** or **Copy**.
5. If you choose **Copy**, and you want the content to be published as soon as the copying is complete, check **Publish Copied Content**.

If you want the content status in the new folder to be checked in, uncheck the **Publish Copied Content** checkbox.

6. Enter the path to the destination folder. If you don't know the path, click **Select Folder** and navigate to the destination folder.
7. Check the boxes next to the content that you want to move or copy.

NOTE Check off the box in the header cell to select all or deselect all eligible content.

8. Choose the content folder to move or copy the selected content from the drop down list.



9. Click the Move/Copy Content button ( ).
10. A confirmation message is displayed.
11. Click **OK**.
12. The content is copied or moved to the destination folder.

Viewing and Restoring Historical Versions of Content

Each time a new version of content is published or checked in, the previous version is stored. Old versions of content may be accessed, and if desired, restored to the Web site.

For more information, see "Viewing and Restoring Previous Content" section of the **Ektron CMS400.NET** User Manual.

Purging Historical Versions of Content

See "Purge History" on page 56.

Scheduling Content

Scheduling content allows you to specify a future date and time when content will be visible on the Web site. Similarly, you can remove content from the Web site on a specified date and time.

For more information, see "Scheduling Content to Begin and End" in the **Ektron CMS400.NET** User Manual.

Deleting Content

Seethe **Ektron CMS400.NET** User Manual Section "Working with Folders and Content" > "Deleting Content".

Content History

See the **Ektron CMS400.NET** User Manual section "Viewing and Restoring Previous Content".

Content Permissions

See "Setting Permissions for Content" on page 784.

Content Approvals

See "Setting Approval Chains" on page 786.

Content Workflow

To learn about the process content must pass through to get published to your Web site, see the **Ektron CMS400.NET** User Manual section “Approving/Declining Content.”

Link Checking

The link checker button locates all content with a link to the displayed content. This feature is useful if you decide to delete content. You can use this to remove those links, which will not work after the deletion.

To display all content that links to the selected content, follow these steps.

1. Access the View Content screen for the content you want to execute the link checker for, as described in ”Viewing Content” on page 83.
2. Click the Check Links button ( ).
3. A screen displays each content item with a link to the current content.
4. Click the content title to access the View Content screen for the selected content and perform the necessary actions on it.

Assigning Tasks to Content

See the **Ektron CMS400.NET** User Manual > “Managing Tasks” > “Creating Tasks via Content”.

Content Properties

The Content Properties screen lets you determine if this content is included in a search of your Web site, and which flagging definition is applied to this content. *See Also:* ”Flagging” on page 972

If your site is using eCommerce, the screen also displays the entry’s product type. *See Also:* ”Product Types” on page 1164

The Content Searchable Check Box

If you uncheck this box, Ektron CMS400.NET excludes this content when a Web site search is performed.

The **Content Searchable** box has *no effect* on

- the ability to find this content from the Workarea Advanced search
- a content item's appearance on a Suggested Results list

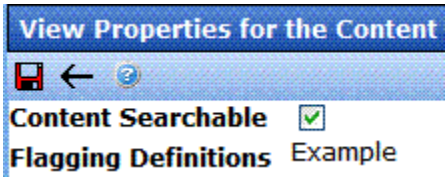
See Also:

- "Suggested Results" on page 420
- "Searching Your Web Site" on page 389

The View Content Properties screen

To view the Content Properties screen, follow these steps.

1. Access the View Content screen for the content whose properties you want to view, as described in "Viewing Content" on page 83.
2. Click the Properties button ( ).
3. The View Properties for the Content screen appears.



4. Check the **Content Searchable** box to include this content in a search of your Web site.
5. Click the Update button ( ).

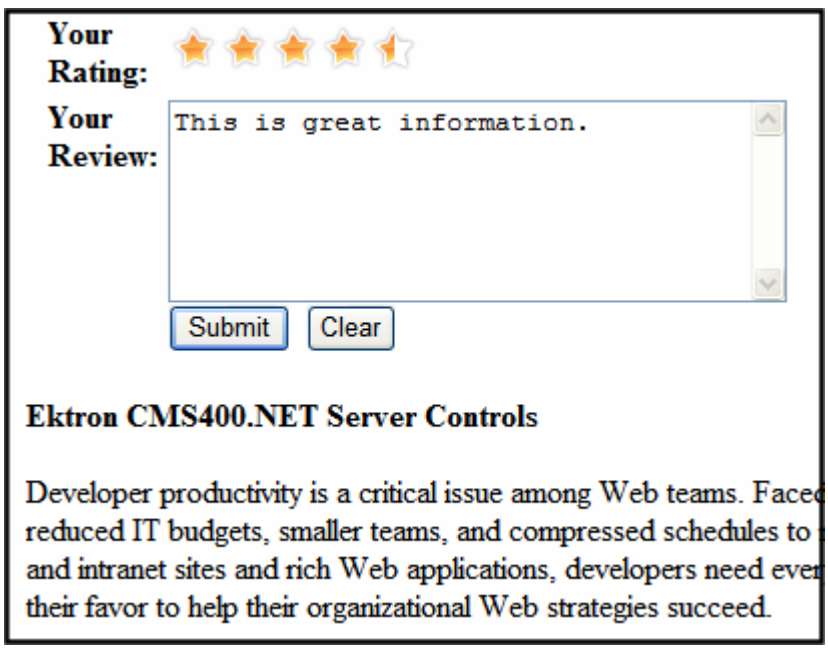
NOTE If you click the Properties button for content that is displayed on a Web page, the View Content screen opens in the Workarea window.

Content Rating

Ektron CMS400.NET provides a rating system, based on stars, so site visitors can rate content on your Web site. A visitor can rate content on a scale of one through five stars. The ratings are collected from the Web page via the ContentReview server control.

Depending on the XSLT used with the ContentReview server control, you can allow half star rating increments and let site visitors submit comments (see illustration below).

NOTE If a visitor is not logged in as a CMS or membership user, his browser must have cookies enabled in order to submit a content rating.


Your Rating:
Your Review:
This is great information.
Submit
Clear
Ektron CMS400.NET Server Controls
Developer productivity is a critical issue among Web teams. Faced
reduced IT budgets, smaller teams, and compressed schedules to
and intranet sites and rich Web applications, developers need ever
their favor to help their organizational Web strategies succeed.

In addition to consuming site visitors' ratings and reviews and displaying the information in the Workarea, the ContentReview server control can be used to display reviews on your site. *See Also:* "Displaying Reviews on the Site" on page 94

Reviews can be moderated from the "Workarea" > "Smart Desktop" or from the Content Rating screen associated with a content item. *See Also:* "Moderating Reviews" on page 95

The content review feature is explained through the following topics.

- ”Inserting the ContentReview Server Control” on page 92
- ”Limiting Visitors to One Review” on page 92
- ”Viewing the Content Rating Report” on page 92

Inserting the ContentReview Server Control

To allow site visitors to rate and review content on a Web page, your developer inserts a server control. This procedure is described in the **Ektron CMS400.NET** Developer Manual section “ContentReview Server Control.”

Limiting Visitors to One Review

Ektron CMS400.NET assumes you want to limit a user to rating a content item once. If a regular or membership user logs in before rating a piece of content, **Ektron CMS400.NET** remembers the user ID. For any other site visitor, **Ektron CMS400.NET** places a cookie on his computer.

So, whenever a page with a ContentReview server control is visited, **Ektron CMS400.NET** checks for the user ID or cookie. If neither exists, it displays a rating scale. If the page has already been rated by the user, the user can edit his existing rating and review by clicking a star, editing the comments, and clicking the submit button.

Viewing the Content Rating Report

All content rating and review data for a content item is maintained and can be displayed in detail and summary format. To view this data, follow these steps.

1. Sign in to **Ektron CMS400.NET**.
2. Do one of the following:

- Navigate to the content item in the Workarea

  - Go to **Workarea** > **Content**.

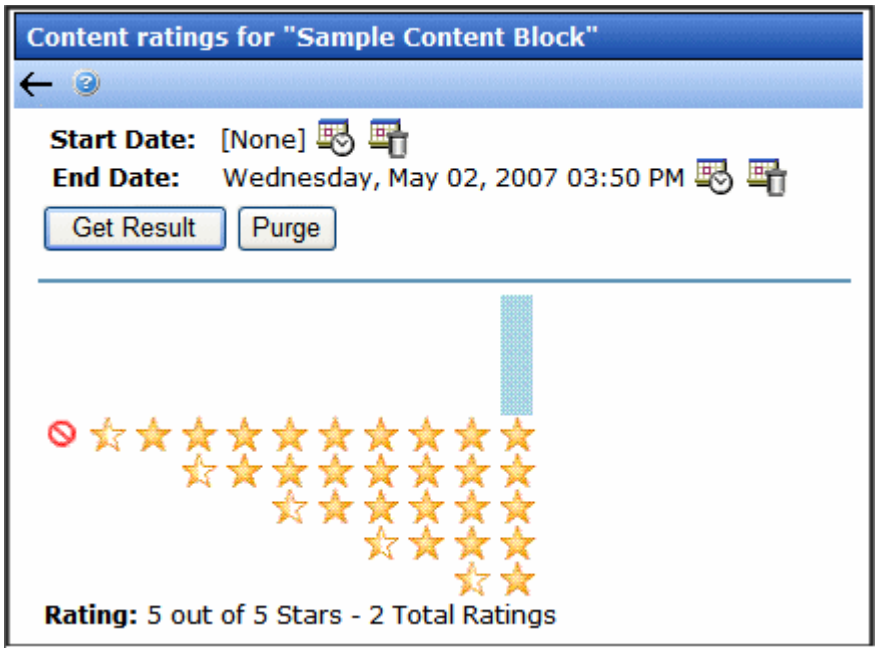
  - Navigate to the folder that contains the content.

  - Navigate to the content item.

- Click the View Rating Reports toolbar button ( ).

- If the review is awaiting moderation, use the Content Review section of the Smart Desktop.
  - Go to the **Workarea** > **Smart Desktop**
  - Click **Content Reviews**
  - Select the content item

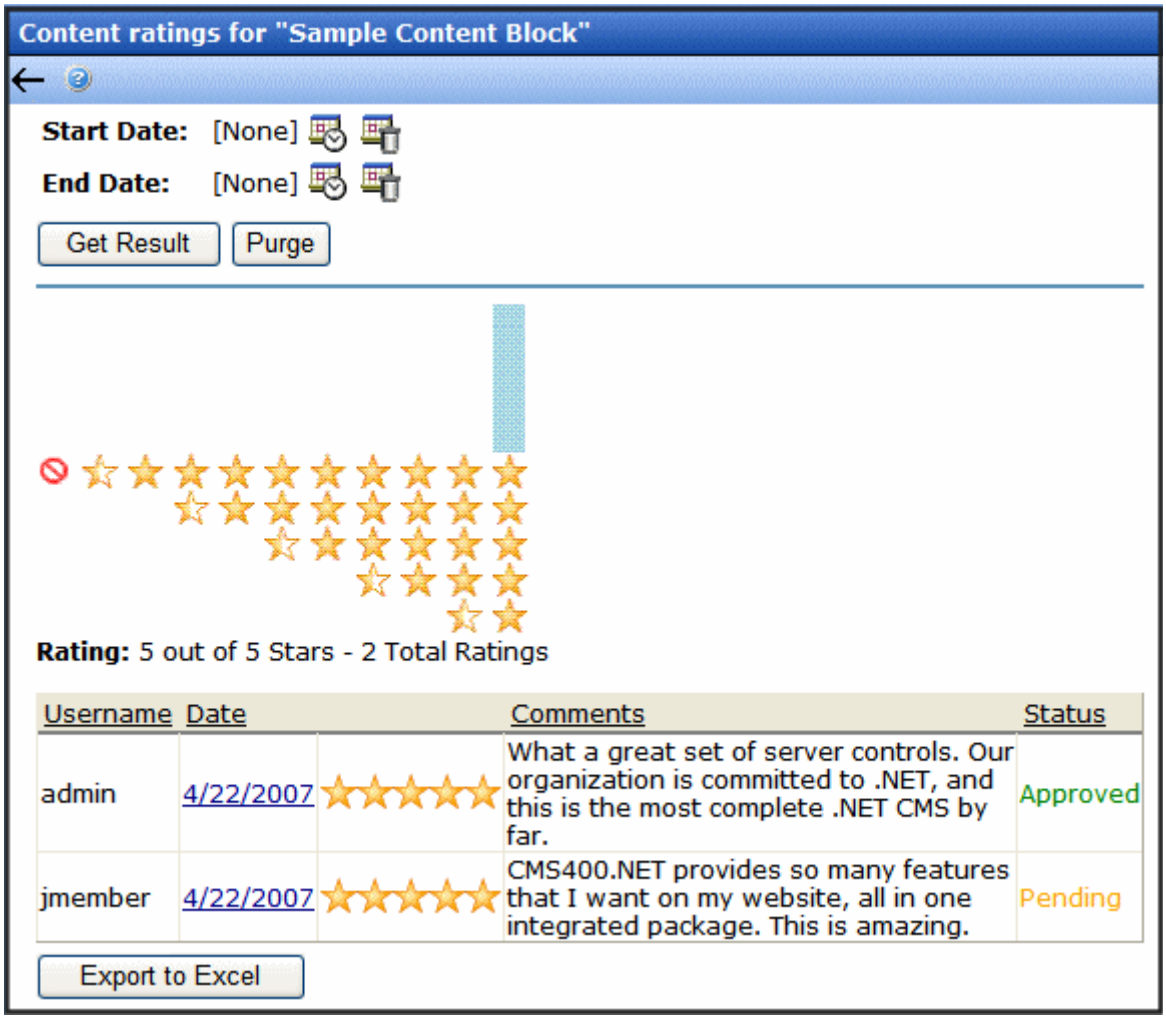
The Content Rating Report shows a summary of all ratings submitted for the content.


Content ratings for "Sample Content Block"
Start Date: [None]
End Date: Wednesday, May 02, 2007 03:50 PM
Get Result
Purge
Rating: 5 out of 5 Stars - 2 Total Ratings

If desired, you can select a range of dates and limit the display of ratings data to those dates. Select start and end dates (using calendar buttons at the top of the screen) and click **Get Result**.

Viewing Content Rating Details

To view details of the ratings data, click **Get Result** (see illustration below).


Content ratings for "Sample Content Block"
Start Date: [None]
End Date: [None]
Get Result
Purge
Rating: 5 out of 5 Stars - 2 Total Ratings
Username
Date
Comments
Status
admin
4/22/2007
What a great set of server controls. Our organization is committed to .NET, and this is the most complete .NET CMS by far.
Approved
jmember
4/22/2007
CMS400.NET provides so many features that I want on my website, all in one integrated package. This is amazing.
Pending
Export to Excel

Displaying Reviews on the Site

Displaying reviews on your site allows visitors see how other people in your site's community feel about a product or content article. It also helps build that community by empowering site visitors and allowing them to have voice.

If your site displays reviews and a user does not see his review, it is probably because moderation is enabled for the content reviews. If a user's review is pending or rejected, it is not displayed. A site or membership user can determine the status of his review by logging

into the site and navigating to the Web page that hosts the content review. Next to the title of his review is **Rejected** or **Pending**. The user can then submit another review if his review was rejected or has been pending for too long.

The ContentReview server control's `DisplayXSLT` property handles the displays of site visitor reviews on the site. The server control can display reviews for specific content or a specific user. For additional information on the DisplayXSLT property, see the **Ektron CMS400.NET** Developer Manual section "ContentReview Server Control.

Moderating Reviews

Since reviews can be displayed on your Web site, **Ektron CMS400.NET** lets you moderate reviews from the Content Ratings screen in the Workarea. This capability is handled by the ContentReview server control's `Moderate` property. See the **Ektron CMS400.NET** Developer Manual section "ContentReview Server Control" > "ContentReview Server Control Properties" > "Moderate."

A site visitor can change his rating and review at any time, even if its status is pending or rejected. When a visitor changes his rating or review, the information is updated immediately in the Workarea, and the review's status changes to pending.

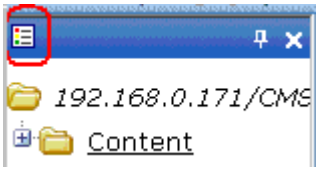
There are two ways to moderate reviews.

- from the **Smart Desktop** > **Content Reviews** area. *See Also:* "Moderating Reviews From the Smart Desktop" on page 95
- from the **Content Rating** screen associated with a content item *See Also:* "Moderating Reviews From the Content Rating Screen" on page 101

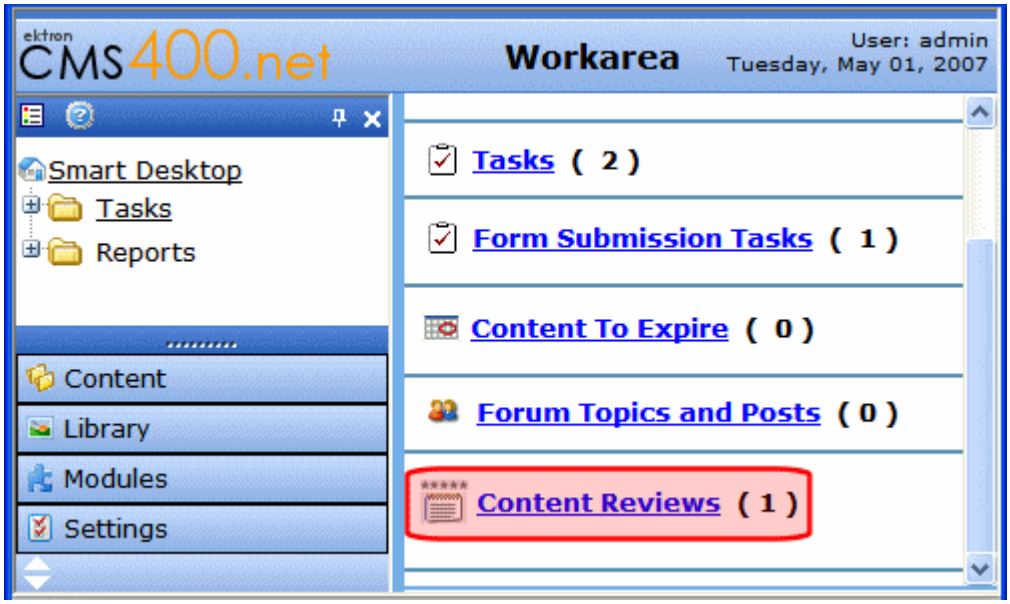
Moderating Reviews From the Smart Desktop

To moderate reviews from the Smart Desktop, follow these steps.

1. Sign in to Ektron CMS400.NET.
2. Click the Smart Desktop button.



3. From the Smart Desktop, click the Content Reviews link.



4. The five latest reviews awaiting moderation appear. Note the **View all pending reviews** link. Click it to see all pending reviews. *See Also:* "Viewing All Pending Reviews" on page 97

Content Reviews (5)
View all pending reviews
Approve Decline Title Display Name Date: Rating Comment
Sample Content Nor 5/1/2007 I Like the new Stars rating system.
Sample Content Anonymous 5/1/2007 Good content, keep up the good work.
Sample Content JE 5/1/2007 This new ContentReview server control looks great.
Beating Cancer jmember 4/22/2007 Very informative.
Sample Content AA 4/22/2007 These server controls seem easy to use.
Update Reviews

5. Select an **Approve** or **Decline** radio button for each item in the list.
6. Click the **Update Reviews** button.

Once the reviews are approved, they appear on the site.

NOTE A ContentReview server control set to display reviews must be on the page for reviews to be displayed. See the Ektron CMS400.NET Developer Manual section "ContentReview Server Control" > "ContentReview Server Control Properties" > "DisplayXSLT."

Viewing All Pending Reviews

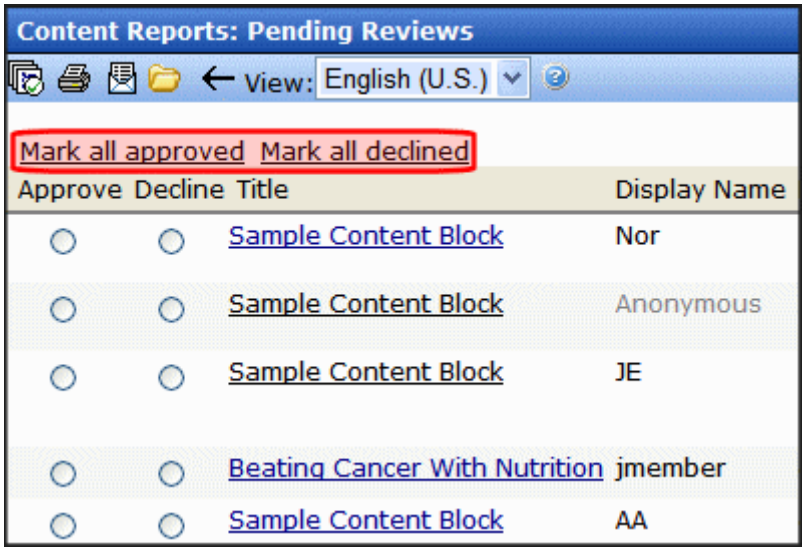
You can view all pending reviews by clicking the **View all pending reviews** link in the Smart Desktop > Content Review screen.

Content Reports: Pending Reviews
View: English (U.S.)
Mark all approved Mark all declined
Approve Decline Title Display Name Date: Rating Comment
Sample Content Nor 5/1/2007 I Like the new Stars rating system.
Sample Content Anonymous 5/1/2007 Good content, keep up the good work.
Sample Content JE 5/1/2007 This new ContentReview server control looks great.
Beating Cancer jmember 4/22/2007 Very informative.
Sample Content AA 4/22/2007 These server controls seem easy to use.

From that screen you can:

- Approve or decline a review - select an **Approve** or **Decline** radio button for each item on the list. Then, click the Submit button( ).
- Mark all reviews approved or all declined - click the **Mark all approved** link to set all the radio buttons to Approve. Click the **Mark all declined** link to set all the radio buttons to Decline.

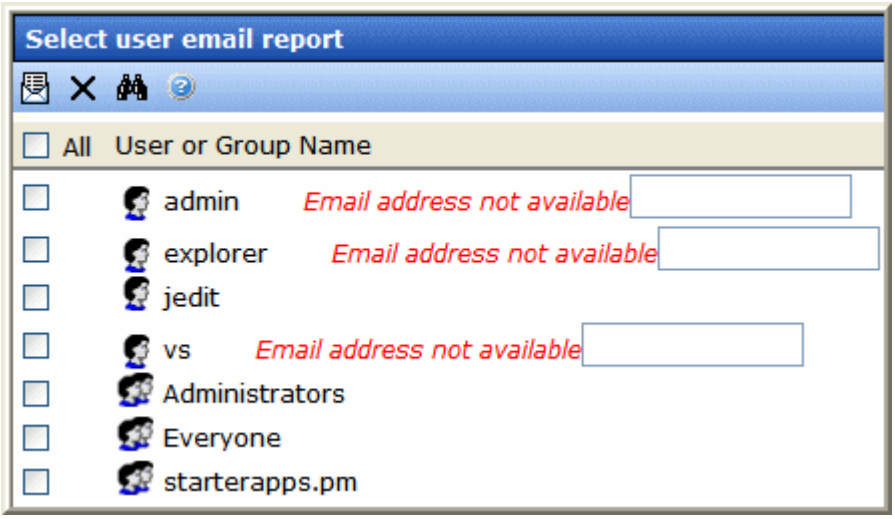
.


Content Reports: Pending Reviews
View: English (U.S.)
Mark all approved Mark all declined
Approve Decline Title Display Name
Sample Content Block Nor
Sample Content Block Anonymous
Sample Content Block JE
Beating Cancer With Nutrition jmember
Sample Content Block AA

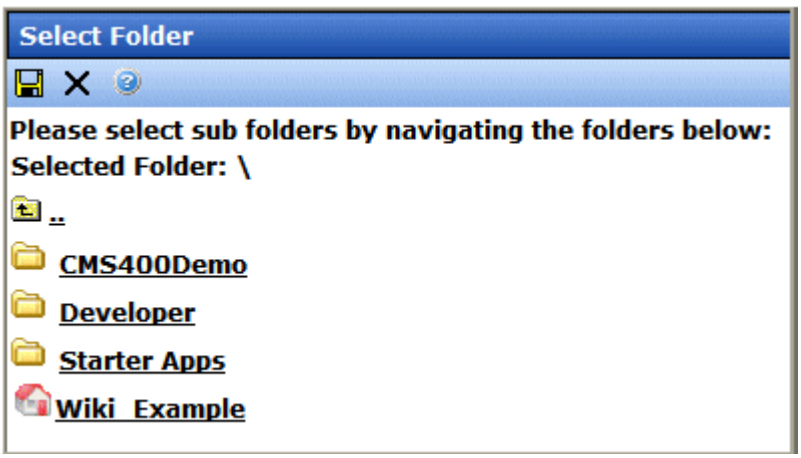
- Edit the rating, review or status of an individual review - click a review's title and the Edit screen appears. Change as needed. Click the Save button ( ).

NOTE After editing a rating, click the **Back Arrow** to return to the content item's Content Rating screen.

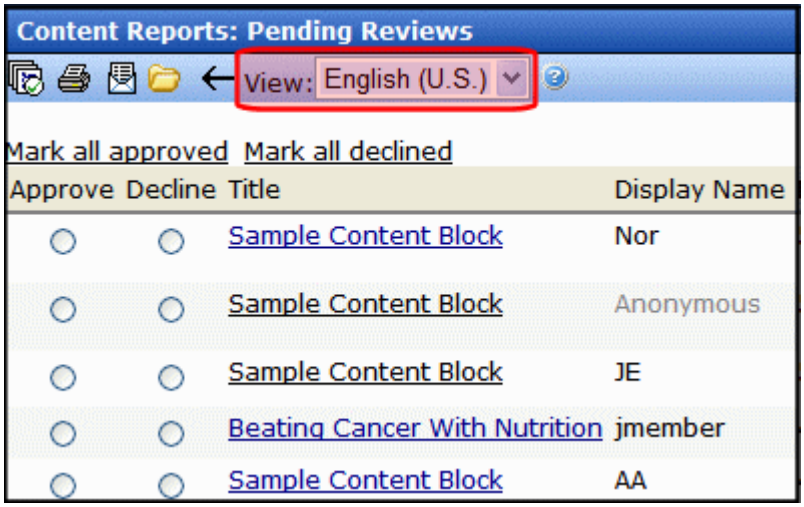
- Print a report of all pending content reviews - click the Print button ( ) to create an HTML version of the pending content review report that is ready for printing.
- Email a pending content review report - click the Email button ( ) to email a pending content review report to Ektron CMS400.NET users. Next, select the users to receive the report. Then, click the Email button ( ) to send the report.



- Filter content reviews by folder - because reviews are associated with content items in a folder, you can filter reviews by folder. This makes it easier to moderate reviews if you are responsible for content in a specific folder. Click the Folder button ( ) and navigate to the folder by which the reviews will be filtered. Then, click the Save button ( ).



- Filter reviews by language - from the Language dropdown box, select the language by which the reviews are filtered.

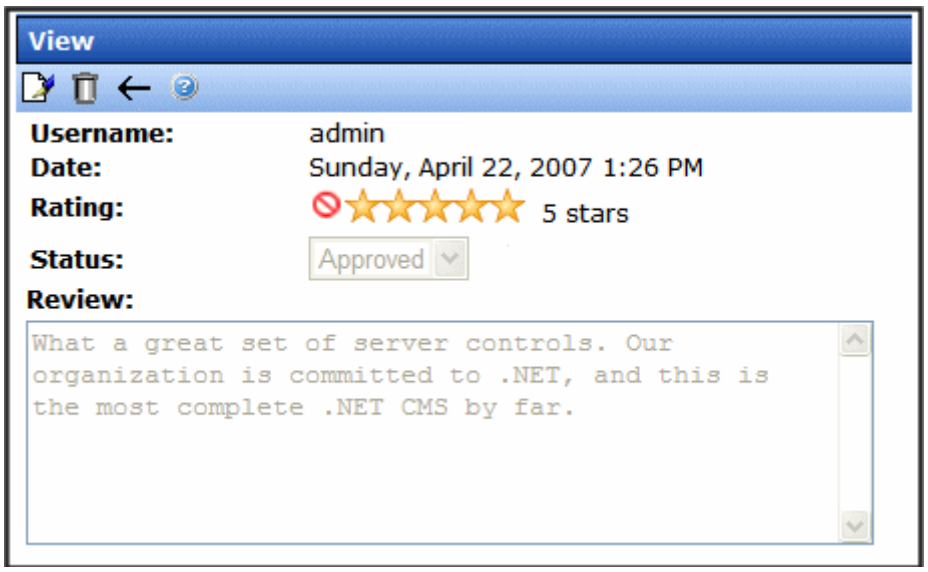


After you approve or decline reviews, click the Submit button ( ). Once reviews are approved, they appear on the site.

Moderating Reviews From the Content Rating Screen

To moderate content reviews from Content Ratings screen, follow these steps:

1. Navigate to the Content Ratings screen for the content item using one of the methods in "Viewing the Content Rating Report" on page 92.
2. Click the **Get Results** button.
3. A list of reviews appear for the content.
4. Click the **Date** link of the content to be moderated.
5. The View Rating screen appears.



- To change information on this screen, click the Edit button ( ). From the Edit screen, you can change the rating, review, and status. When finished, click the Save button ( ).

- To delete the review, click the Delete button ( ).

Exporting Details to Excel

If Microsoft Excel is installed on your computer, you can export the ratings detail to Excel for further manipulation of the data. To do so, the **Click Export to Excel** button.

Purging Rating Data

You can remove content rating data to free up space in your database. To do so, select the date range of the data you want to purge using **Start Date** and **End Date**. Then click the **Purge** button.

Validating XHTML Content and Accessibility

By validating XHTML content and accessibility, you can ensure your content is XHTML compliant and that individuals with disabilities can navigate and understand your site.

This chapter is divided into two sections: ”Validating with eWebEditPro+XML” on page 104 and ”Validating with eWebEdit400” on page 113.

Validating with eWebEditPro+XML

eWebEditPro+XML can validate content against these types of compliance.

- **XHTML standards** - see "Validating Content for Compliance with XHTML Standards" on page 110
- **Section 508 Validation** - accessibility standards established by agencies such as W3C Markup Validation Service - see "Validating Content For Compliance with Accessibility Standards" on page 106
- **Smart Form Data** - makes sure that data entered into a smart form's field is the correct type and format. This selection only checks smart form fields if validation for the field was turned on when it was added to the Smart Form. Validation for each field type is explained in "Data Designer Field Types" on page 227.

NOTE An additional type of validation ensures that when a site visitor completes a Web form, the information is formatted correctly. For example, a Social Security number must have three numbers, a dash, two numbers, another dash, and four numbers. This type of validation is explained in **Ektron CMS400.NET**'s User Manual section "Introduction to eWebEdit400" > "Working with HTML Forms" > "Form Validation."

An editor can validate content while editing by clicking the Validate button ( ). In addition, a validation check is performed when a user tries to save, check in or (submit for) publish content.

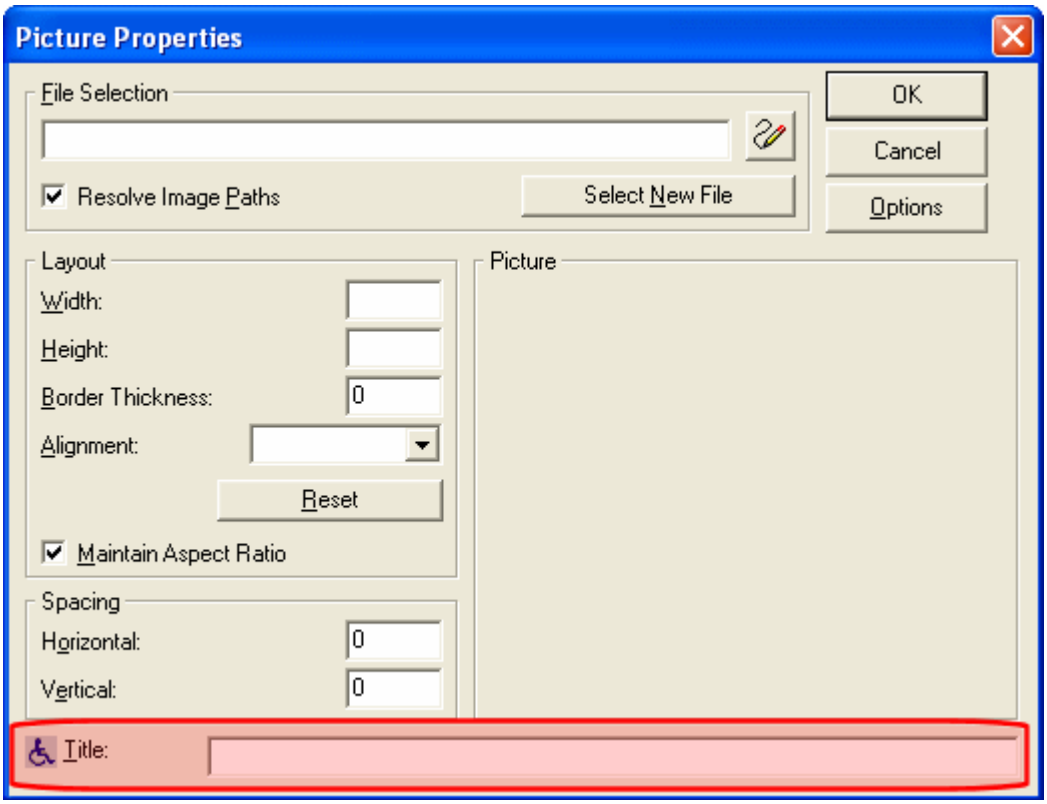
In addition, some dialogs add accessibility data to **Ektron CMS400.NET** content. As an example, the Picture Properties is used to add an image's `<alt>` attribute.

The rest of this section provides details about validating XHTML content through these topics.

- ”Dialogs that Allow Input of Accessibility Information” on page 105
- ”Validating Content For Compliance with Accessibility Standards” on page 106
- ”Validating Content for Compliance with XHTML Standards” on page 110

Dialogs that Allow Input of Accessibility Information

Several dialog boxes collect accessibility data. See example below.



When the `cms_config.aspx's suggestdefaultval` property is set to `true`, **Ektron CMS400.NET** tries to ensure that a value exists in required accessibility fields of the following dialogs.

Dialog	Field	How filled if no value exists
Picture Properties	Title	Contents of **File Selection** field copied
Hyperlink	Title	Contents of **Text** field copied
Group Box	Caption	Contents of **Descriptive Name** field copied to **Caption** field
Several Data Designer dialogs, such as Plain Text Field, Image Only field, Link Field, Select List Field	Tooltip text	Contents of **Descriptive Name** field copied

Validating Content For Compliance with Accessibility Standards

To have **Ektron CMS400.NET** check content for compliance with accessibility standards, you enable accessibility in the Setup screen *and* specify an XSLT or Web site to check against.

Enabling Accessibility Validation

In the **Ektron CMS400.NET** Workarea, accessibility options appear on the **Settings > Configuration > Setup** screen under **Accessibility/Section 508 Evaluation** (below **Editor Options**). The options are explained below.

- **Do not validate** - do not check content for compliance with accessibility standards
- **Warn if fails** - the user is warned but allowed to publish the content
- **Enforce** - the user must bring the content into compliance before submitting it for publication or publishing it; however, can save it or check it in after being warned.

Defining the XSLT or Web Site

When a user tries to save content and **Accessibility/Section 508 Evaluation** is set to **Warn if fails** or **Enforce**, the content is checked against an XSLT, a Web site designed to validate content, or both.

If you enable both, the content is checked in this order.

1. XSLT
2. Web site

If the first check fails, the second check is not performed.

The XSLT File

Ektron CMS400.NET content can be checked against an XSLT that enforces W3C's WCAG Level 1 requirement. By default, this XSLT is `site root/Workarea/ewebeditpro/ektaccesseval.xslt`. You can modify this XSLT as needed.

If you want to use a different XSLT, place it in the **Ektron CMS400.NET** root directory and refer to it in the `site root folder\Workarea\ewebeditpro\cms_config.aspx` file's `xslt src` attribute, as shown below.

```
<xslt enabled="true" src="[eWebEditProPath]/ektaccesseval.xslt" />
```

If you change the XSLT and validation fails, it should return a description of the problem(s) as HTML. If validation succeeds, it should return nothing.

Validating Against a Web Site

You can also validate XHTML content for accessibility against a Web site. Two such sites are listed in *`site root`*`\Workarea\ewebeditpro\cms_config.aspx`.

- hermish.com
- webaim.org

You can use either listed site or any other site designed to check for accessibility compliance. However, you can only use one.

NOTE Changes to these web sites may adversely affect the ability to validate. Ektron cannot control how validation Web sites operate. Your ability to change the validation Web site is described below.

The Web sites are specified in these lines of `cms_config.aspx`. To activate a site, set `enabled` to `true`.

```
<online enabled="false" type="string" contentname="myHTML" src="http://www.hermish.com/
check_this.cfm">

<online enabled="false" type="file" contentname="upload" src="http://wave.webaim.org/wave/
Output.jsp">
```

Enabling a Site Not Included in cms_config.aspx

By default, **Ektron CMS400.NET** only supports sites listed in `cms_config.aspx`. If you want to validate content against another Web site designed to do that, follow these guidelines.

- Web sites that perform validation typically accept input in this format.

```
<form action="http://www.example.com/validationaction.asp">

   <textarea name="testcontent"></textarea>

   <input type="submit" name="btnSubmit" value="Validate the
content"/>

</form>
```

To accommodate this format, define the `cms_config.aspx's` <`online`> element as follows.

```
<online enabled="true" type="string" contentname="testcontent"
src="http://www.example.com/ validationaction.asp"
keywordsearchresult="failure" keyword="invalid">

    <data name=" btnSubmit"> Validate the content</data>

</online>
```

The following table describes `<online>`'s attributes.

<Online> Attribute	Description
type	If the form accepts an HTML string as input, enter string. If the form accepts a file name as input, enter file.

contentname	Enter the value of the `name` attribute of the textarea or input element in the form.
	For a form that accepts an HTML string, the textarea may appear as:
	`<textarea name="testcontent"></textarea>`
	In this case, the value for contentname would be testcontent.
	For a form that accepts a file, the input element may appear as:
	`<input type="file" name="testfile" />`
	In this case, the value for contentname would be testfile.

src	To obtain the URL of the Web page that validates HTML content, go to the site and view the source. From there, you should be able to obtain the form's action attribute. Place that into this attribute.
keywordsearchresult	Takes one of two values: `failure` or `success`. • If set to `success` and **Ektron CMS400.NET** finds the keyword (set in the keyword attribute) in the validating Web page's response, the content is saved. • If set to `success` and **Ektron CMS400.NET** does *not* find the keyword in the validating Web page's response, the Web site's failure page appears. Typically, the page explains why the content failed validation. • If set to `failure`, and **Ektron CMS400.NET** finds the keyword (set in the keyword attribute) in the validating Web page's response, Web site's failure page appears. Typically, the page explains why the content failed validation. • If set to `failure`, and **Ektron CMS400.NET** does not find the keyword in the validating Web page's response, the content is saved. If you do not define a keyword and keywordsearchresult, the validating Web page's response (or report) appears.

<Online> Attribute	Description
keyword	Enter a text string that **Ektron CMS400.NET** searches for in the source of the Web site's response to the validation check. For example, if the site displays **Congratulations** when validation passes, enter **Congratulations** in this attribute. In this case, enter `success` as the `keywordsearchresult`. As another example, if you know that a Web site displays the `images/icon_violation.gif` image when validation fails, enter that as the keyword. In this case, enter `failure` as the `keywordsearchresult`.
data	Enter additional form fields to be posted to the Web site during form submission. • The `name` attribute of the data tag specifies the name of the form field. • The value between the `data` tags is the value of the form field when submitted. You may specify as many data tags as needed. For example `<data name="btnSubmit">Validate the content</data>`

Validating Content for Compliance with XHTML Standards

Ektron CMS400.NET content can be validated against the XHTML 1.0 schema, a Web site, or both. These are described in "The Schema" on page 110 and "Validating Against a Web Site" on page 111.

NOTE This validation does not consider the value of the Workarea > Configuration >Setup Screen's **Accessibility/Section 508 Evaluation** fields.

Besides specifying a schema or Web site, you need to uncomment the following line in `site root/Workarea/ewebeditpro/ektfilter.xslt`. This XSLT removes non-W3C-compliant tags and attributes.

```
<xsl:include href="ektfilterxhtml10.xslt"/>
```

The Schema

eWebEditPro+XML provides two schemas from the W3C site.

- www.w3.org/2002/08/xhtml/xhtml1-strict.xsd
- www.w3.org/2002/08/xhtml/xhtml1-transitional.xsd

The schemas are installed to the *siteroot*/workarea/ewebeditpro directory. You identify which schema will be used in the following lines of the *siteroot*/workarea/ewebeditpro/config.xml file.

```
<schema enabled="false" src="[eWebEditProPath]/xhtml1-strict.xsd"/>
<schema enabled="false" src="[eWebEditProPath]/xhtml1-transitional.xsd"/>
```

To specify a schema against which to validate content, set enabled to true.

You can modify either .xsd file as needed. Or, you can use your own .xsd file.

Using Your Own Schema

The schema tag's src attribute can reference any URL. If you want to place your own .xsd file in the *siteroot*/workarea/ewebeditpro directory, use [eWebEditProPath]. To place the .xsd file in another location, enter its path relative to the site root. For example, src="/*siteroot*/schemas/myschema.xsd".

IMPORTANT! If you are using a different .xsd file, you must add elementFormDefault="qualified" to the schema as shown below.

```
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified">
```

IMPORTANT! Because of an error in XML parser 4 (see http://support.microsoft.com/default.aspx?scid=kb;EN-US;q262585), Ektron has removed the namespace from the schemas. If you design your own schema, do not use 'xml' to begin user-defined namespace prefixes.

Validating Against a Web Site

You can validate content against any Web site that enforces W3C's XHTML standards. One site listed in cms_config.aspx is validator.w3.org. You can use that site or another designed to check for XHTML compliance.

To activate that site, open the *siteroot*/workarea/ewebeditpro/config.xml file, and set enabled to true, as shown in the code snippet shown below.

```
<online enabled="true" type="string" contentname="fragment" src="http://validator.w3.org/
check"/>
```

If you want to use a different Web site, follow the directions in ”Enabling a Site Not Included in cms_config.aspx” on page 108.

Validating with eWebEdit400

eWebEdit400 can check content for the following types of compliance.

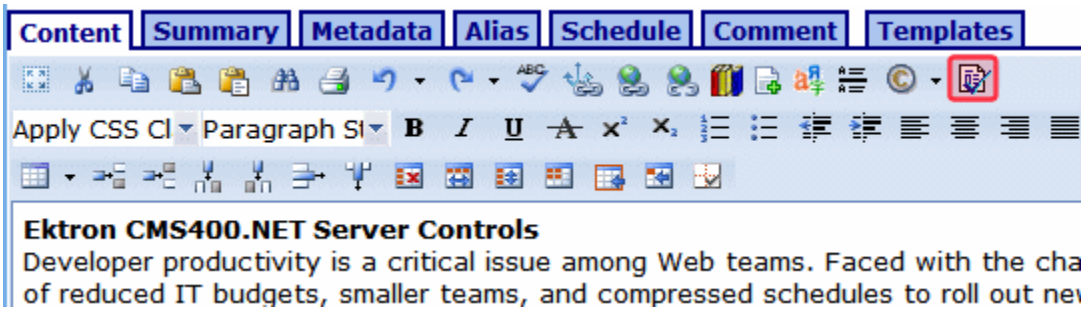
- **Design** - checks for the design standards such as proper closing tags and unique field names.

NOTE There is nothing you need to do to enable this type of validation, nor can you customize it.

- **XHTML standards** - see "Validating Content for Compliance with XHTML Standards" on page 116.
- **Section 508 Validation** - accessibility standards established by agencies such as W3C Markup Validation Service - see "Setting up and Customizing Accessibility Validation" on page 114.
- **Smart Form Data** - makes sure that data entered into a smart form's field is the correct type and format. This selection only checks smart form fields if validation for the field was turned on when it was added to the Smart Form. Validation for each field type is explained in "Data Designer Field Types" on page 227.

NOTE An additional type of validation ensures that when a site visitor completes a Web form, the information is formatted correctly. For example, a Social Security number must have three numbers, a dash, two numbers, another dash, and four numbers. This type of validation is explained in **Ektron CMS400.NET**'s User Manual section "Introduction to eWebEdit400" > "Working with HTML Forms" > "Form Validation."

An editor can validate content while editing by clicking the Validate button ( ) (illustrated below).



In addition, **eWebEdit400** automatically validates content whenever the user tries to save, check in or (submit for) publish content. *See Also:* "Step 1: Enable Accessibility" on page 114

When validation is checked, any errors appear on the screen. If the content passes validation, a message states **The content is valid**.

The rest of this section provides details about validating XHTML content through these topics.

- "Setting up and Customizing Accessibility Validation" on page 114
- "Validating Content for Compliance with XHTML Standards" on page 116

Setting up and Customizing Accessibility Validation

To have **eWebEdit400** check content for compliance with accessibility standards, follow these steps.

See Also:

- "Step 1: Enable Accessibility" on page 114
- "Step 2: Use Dialogs to Enter Accessibility Information" on page 115
- "Customizing Accessibility Checks" on page 116

Step 1: Enable Accessibility

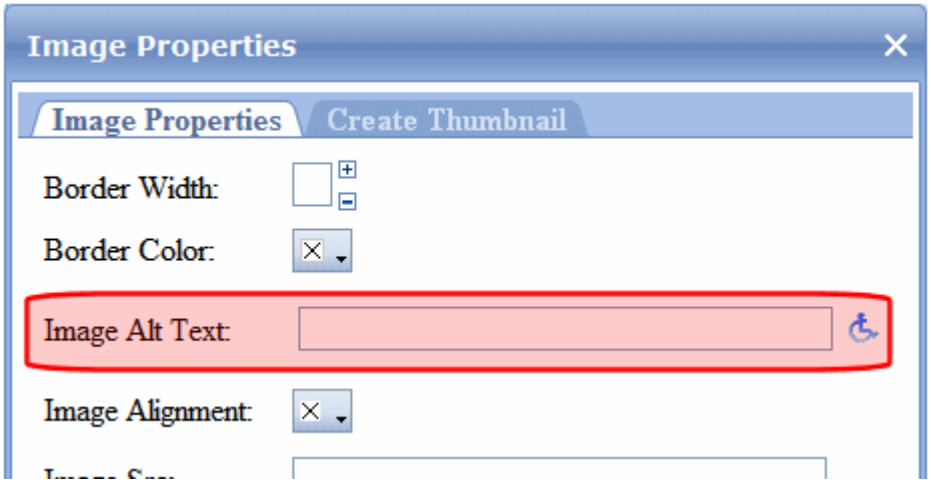
In the **Ektron CMS400.NET** Workarea, accessibility options appear on the **Settings > Configuration > Setup** screen under

Accessibility/Section 508 Evaluation (below **Editor Options**). The options are explained below.

- **Do not validate** - do not check content for compliance with accessibility standards
- **Warn if fails** - the user is warned but allowed to publish the content
- **Enforce** - the user must bring the content into compliance before submitting it for publication or publishing it; however, can save it or check it in after being warned.

Step 2: Use Dialogs to Enter Accessibility Information

Several dialog boxes let the content editor enter accessibility information. An example is below.



The table below lists dialog boxes in which accessibility information can be entered.

Dialog	Field	How filled if no value exists
Image Properties	Image Alt Text:	Uses the image's title
Table Wizard - Cell Properties Tab	Abbreviation: Categories:	Not automatically filled when no value exists

Dialog	Field	How filled if no value exists
Table Wizard - Accessibility Tab	Caption: Summary:	Not automatically filled when no value exists
Hyperlink Manager (Includes Quicklinks)	Tooltip:	Contents of **Link Text** field copied

Customizing Accessibility Checks

All standard accessibility checks are stored in the *site root*/Workarea/Content Designer/ektaccesseval.xslt file. If you want to customize which checks are applied, edit that file.

To change or disable the .xslt file that eWebEdit400 uses to validate for accessibility, edit this line of *site root*/Workarea/Content Designer/ValidateSpec.xml.

```
<validate>
<xslt id="ektaccesseval" name="Section 508 Validation" enabled="true" src="[srcPath]/
ektaccesseval.xslt"/>
```

Validating Content for Compliance with XHTML Standards

Ektron CMS400.NET content can be validated against the XHTML 1.1 standard. To do so, you must define the Web sites that validate schema files and schema namespaces.

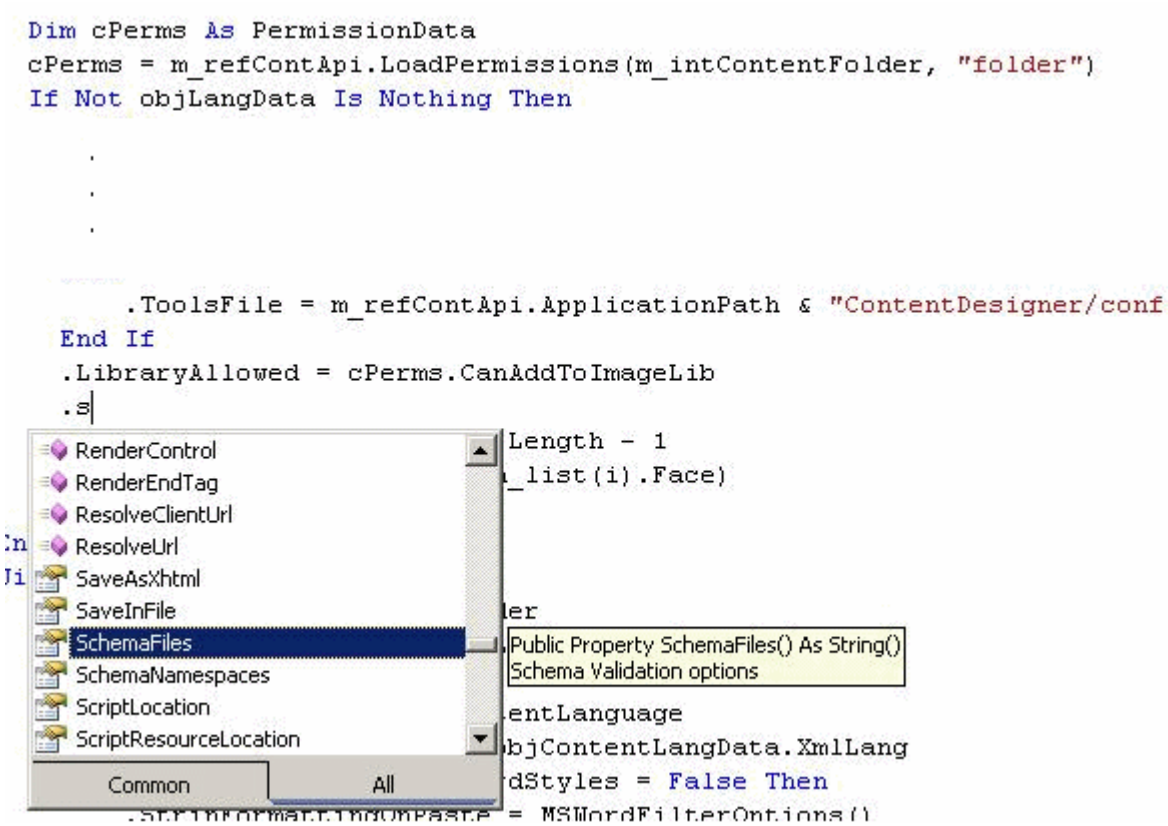
Here are two sites that can validate content using the WC3 Markup Validation Services.

- schema files - `http://www.w3.org/2002/08/xhtml/xhtml1-transitional.xsd`
- schema namespaces - `http://www.w3.org/1999/xhtml`

Defining the XHTML Validation Schemas

To validate content against XHTML standards, follow these steps.

1. Using Visual Studio, open *`site root`*`/Workarea/edit.aspx.vb`.
2. Find the section indicated below.



3. Using Intellisense, enter `SchemaFiles` and `SchemaNamespaces` properties to define the validating Web sites. They accept an array of strings and go in pairs. Here are examples.

C#

```
ContentDesigner1.SchemaFiles = new string[] {"http://www.w3.org/2002/08/xhtml/xhtml1-
transitional.xsd"};
ContentDesigner1.SchemaNamespaces = new string[] { "http://www.w3.org/1999/xhtml" };
```

VB.Net

```
With m_ ContentDesigner1
.SchemaFiles = New String() {" http://www.w3.org/2002/08/xhtml/xhtml1-transitional.xsd"}
.SchemaNamespaces = New String() {"http://www.w3.org/1999/xhtml”}
End With
```

Metadata

Metadata is information about a content item, such as its title and language. **Ektron CMS400.NET** provides extensive and flexible support for metadata, which it uses in both standard and innovative ways.

This section explains the types of metadata available, and procedures for working with metadata through the following subtopics.

- ”Types of Metadata” on page 118
- ”Working with Metadata Definitions” on page 128

Types of Metadata

The following kinds of metadata can be added to **Ektron CMS400.NET** content.

Metadata type	Description	For more information, see
Meta tag	Resides in the source code. Helps search engines find a Web page. Note: You can use the SEO Control to identify how search engines evaluate your Web pages’ metadata tags, and other search tools. *See Also:* **Ektron CMS400.NET** Developer Manual section “Using the Search Engine Optimization (SEO) Control.”	”Meta Tags” on page 119
HTML tag	Information about the page to be used by a Web browser. For example, `<title>` identifies the content in the screen title, the favorites list, and the browser’s history.	”Title Tag” on page 121

Metadata type	Description	For more information, see
Searchable	Metadata that can be found by **Ektron CMS400.NET**'s search.	"Searching for Metadata" on page 445
Related content	A related content item, collection, List Summary, or library item that accompanies a content item on a Web page.	"Related Content Metadata" on page 123
Simple Dublin Core	A set of fifteen standard fields that cover the most useful information about content.	"Simple Dublin Core Metadata" on page 126
Content tags	Keywords that can be assigned to content and library items and allows for tag-based searching.	"Tags" on page 989

Best Practices

- When anyone creates a new Metadata definition, it is assigned the next available ID number. The ID numbers determine the order in which metadata definitions are arranged on the Folder Properties screen's Metadata tab.

  So, by planning ahead, you can enter metadata definitions in logical groupings, which will make it more intuitive for the person assigning the metadata to pick the correct ones.
- Metadata can be used as a search criterion to find content on your Web site. In order for this to work, the metadata definition name cannot include a space. So, it is a good idea to eliminate spaces from metadata definition names.

Meta Tags

The META element is an extensible container for use in identifying specialized document meta-information. Meta-information has two main functions:

- to provide a means to discover that a data set exists and how it might be obtained or accessed

- to document the content, quality, and features of a data set, indicating its fitness for use

(Above copied from `www.w3.org/MarkUp/html-spec/html-spec_5.html`.)

Example Meta Tags

```
<HTML>
<HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1"
<meta name="robots" content="index, follow">
<meta name="revisit-after" content="15 days">
<META HTTP-EQUIV="imagetoolbar" CONTENT="no">
<Title>Ektron; Inc. - Web Content Management and Document Management wi
scalable flexible and affordable authoring solutions.</Title>
<meta name="Keywords" content="document management web content manageme
content management cms">
<meta name="Description" content="Ektron's Web Content Management and
Document Management software products manage web content and documents
WYSIWYG XHTML/HTML editors offering easy to use browser-based Web autho
and publishing solutions for Web content management and document
management">
```

Creating and Deploying Meta Tag Definitions

1. While creating a metadata definition, enter the metadata name at the **Name** field. For example, **Description** and **Keywords**.
   See Also: ”Adding a Metadata Definition” on page 129
2. Reply to the standard fields. See ”Metadata Definition Fields” on page 131.
3. Respond to the additional fields for meta tags. See ”Meta Tag Additional Fields” on page 132
4. Add the definition to all applicable folders. See ”Assigning Metadata to a Folder” on page 141
5. Add the definition to applicable content within the folder. See ”Adding Metadata to Content” on page 144
6. Add a Metadata server control to every Web form (.aspx page) on which the content will appear.

   To learn how to do this, see the Ektron CMS400.NET Developer Manual section “Introduction to **Ektron CMS400.NET**

Server Controls" > "MetaData Server Control" and "MetaDataList Server Control."

Title Tag

The title should identify the contents of the document in a global context. A browser may display the title of a document in a history list or as a label for the window displaying the document.

(Above text copied from www.w3.org/MarkUp/html-spec/html-spec_5.html.)

```
<HTML>
<HEAD>
<META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=iso-8859-1"
<meta name="robots" content="index, follow">
<meta name="revisit-after" content="15 days">
<META HTTP-EQUIV="imagetoolbar" CONTENT="no">
<Title>Ektron; Inc. - Web Content Management and Document Management wi
scalable flexible and affordable authoring solutions.</Title>
<meta name="Keywords" content="document management web content manageme
content management cms">
<meta name="Description" content="Ektron's Web Content Management and
Document Management software products manage web content and documents
WYSIWYG XHTML/HTML editors offering easy to use browser-based Web autho
and publishing solutions for Web content management and document
management">
```

Creating and Deploying Title Tag Definitions

1. While creating a metadata definition, enter **Title** at the **Name** field. *See Also:* "Adding a Metadata Definition" on page 129
2. Reply to the standard fields. See "Metadata Definition Fields" on page 131.
3. Respond to the additional field for HTML tags. See "HTML Tag Additional Field" on page 131.
4. Add the definition to a folder. See "Assigning Metadata to a Folder" on page 141.
5. Add the definition to content within the folder. See "Adding Metadata to Content" on page 144.

6. Add a metadata control to every Web form (.aspx page) on which this content will appear.

   To learn how to do this, see the Ektron CMS400.NET Developer Manual section “Custom Functions (for your server platform)” > “Metadata Function”, “MetaData Server Control” and “MetaDataList Server Control.”

Creating and Deploying Search Tag Definitions

1. While creating a metadata definition, in the **Name** field, enter a description of the kind of data to be searched. (See examples circled above.) This title describes the search data on the

   •**Metadata** tab of the Folder Properties screen

   •**Metadata** tab of the View Content Screen

   •Workarea search screen

NOTE Searchable metadata field names should not include a space. If they do, the search cannot find the metadata.

See Also: ”Adding a Metadata Definition” on page 129

2. Reply to the standard fields. See ”Metadata Definition Fields” on page 131.
3. Respond to additional fields for Searchable Property definitions. See ”Searchable Additional Fields” on page 133.
4. Add the definition to a folder. See ”Assigning Metadata to a Folder” on page 141.
5. Add the definition to content within the folder. See ”Adding Metadata to Content” on page 144.
6. The next time you visit the Workarea search screen, you will see the new field.
7. If you want site visitors to use this field when searching your Web site, ask your developer to set the `ShowExtendedSearch` property of the Search Server Control to **true**. This value enables the Web site search to find searchable metadata.

   See Also: **Ektron CMS400.NET** Developer Manual > “Introduction to Ektron CMS400.NET Server Controls” > “Search Server Control” > “Search Server Control Properties” > “ShowExtendedSearch”

Related Content Metadata

You can associate the following types of content with a content item.

- a content item
- a collection
- a list summary
- a menu
- a user
- one of the following types of library items
  - image
  - hyperlink
  - file

Then, you can set up a Web page so that whenever the source content item appears, the related information appears next to it. For example, your Web site sells motorcycle helmets. On a page that shows a particular helmet, the left column lists a collection of motorcycle drivers who wear that helmet. Another example might be that you want to show the profile of a user when a given content item is displayed.

Related Content vs. MetadataList Server Control

This capability is similar to the MetadataList Server control. The difference is that MetadataList shows a link to *every* content item with a selected term in the keywords or title. Also, a MetadataList is associated with a Web form (.aspx page), not a content item.

Related content lets you connect a content item with several types of related content (see list above), and is associated with a content item, not a web form. For example, you can display a library image of the company logo on a page whenever content in a certain folder appears. For content in a different folder, a different logo could appear.

Creating and Deploying Related Content Definitions

1. While creating a metadata definition, in the **Name** field, enter a title for this kind of data. This title describes the metadata on the

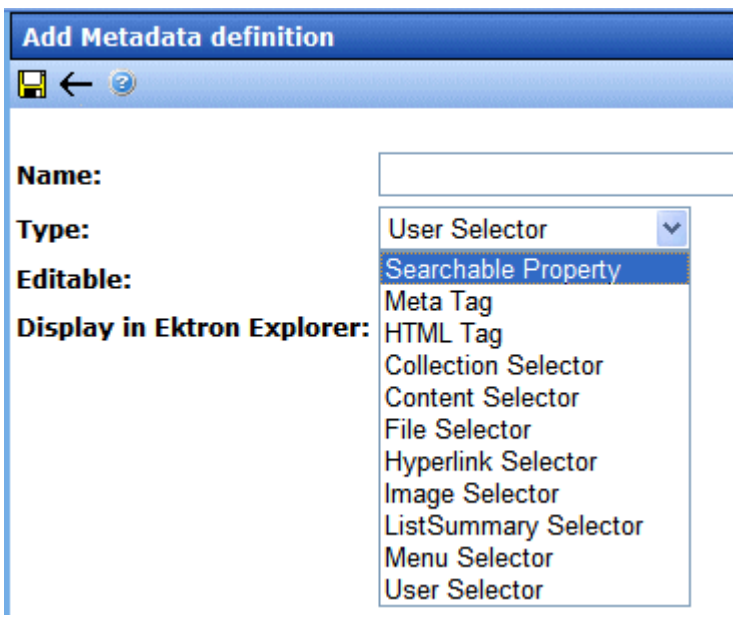
   •**Metadata** tab of the Folder Properties screen

   •**Metadata** tab of the View Content screen

   See Also: ”Adding a Metadata Definition” on page 129

2. Reply to the standard fields. See ”Metadata Definition Fields” on page 131.

   The **Type** must end with the word **Selector**. Choices are highlighted below.



   For example, if you choose **ListSummary Selector**, a specified List Summary will appear on the page along with its associated content item.

   Your choices are

   •Collection Selector

   •ListSummary Selector

   •Content Selector

•Image Selector *(associates a library image with content)*

•Hyperlink Selector *(associates a library hyperlink with content)*

•File Selector *(associates a library file with content)*

•Menu Selector

•User Selector

3. Add the metadata definition to all appropriate folders. See "Assigning Metadata to a Folder" on page 141
4. For each content item with which you want to associate related content, access its **Metadata** tab and identify the related item(s).

WARNING! If you are using **Collection Selector** type, only users with permission to work with collections can select a collection. Also, if you are using **Image, Hyperlink or File Selector** type, only users with permission at least read-only Library permissions can select a library item. *See Also:* "Setting Permissions" on page 776

For example, a collection of pages describes motorcycle helmets. You want this collection to appear whenever a helmet is being viewed.

To set this up, you would

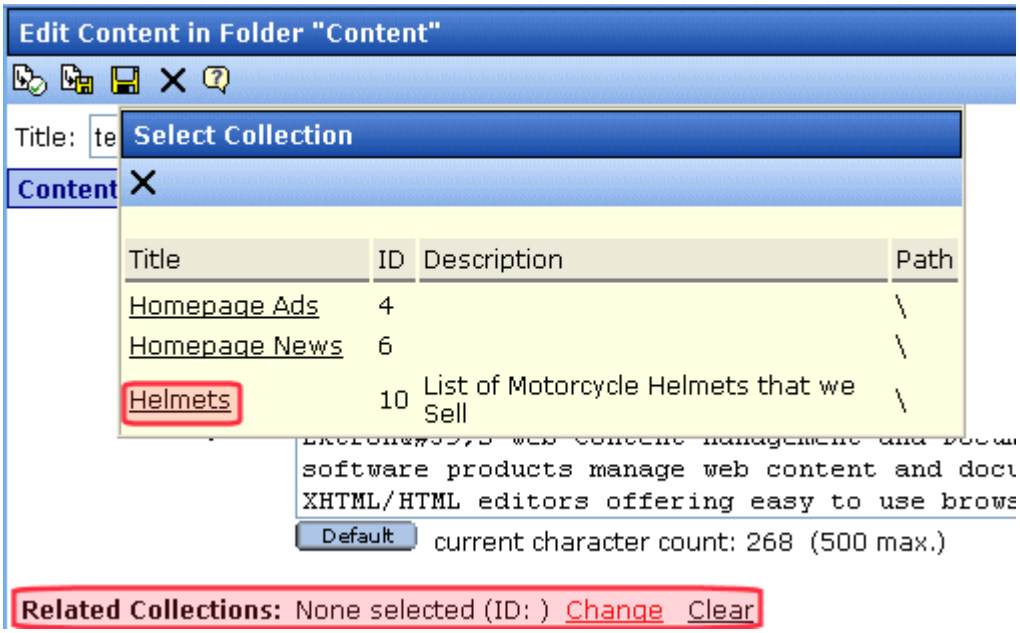
- edit the helmet content item

- click its **Metadata** tab

- find the metadata definition for the collection

- click **Change**

- select the Helmet Collection



5. Have your Web developer add code to each page on which the related item appears. To learn how to do this, access the developer sample page (`http://localhost/cms400developer/developer/default.aspx`) and read the **Metadata > Meta Associations** description.

NOTE To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`.

Simple Dublin Core Metadata

Simple Dublin Core is a set of fifteen standard names for metadata fields designed to cover the most useful items of information on a document. From the Dublin Core site FAQ: “Dublin Core metadata provides card catalog-like definitions for defining the properties of objects for Web-based resource discovery systems.” For more information, refer to the Usage Guide: http://www.dublincore.org/documents/usageguide/.

By using the Metadata Server Control, you automatically create seven of the fifteen Dublin Core metadata fields. These fields are automatically filled with the information from the equivalent Ektron CMS400.NET property. Below is a list of the seven fields and their

Ektron CMS400.NET equivalent. For more information on the Metadata Server Control, see the Developer's Manual section "Introduction to Ektron CMS400.NET Server Controls" > "MetaData Server Control"

Dublin Core Field Name	Ektron CMS400.NET Property
DC.title	Content block title
DC.description	Plain text version of a content summary
DC.contributor	Content block last editor name
DC.date	Content block last edit date
DC.format	"text/html"
DC.identifier	URL of current page (from ASP.NET Server.Request object)
DC.language	CMS language cookie / current site language, expressed as a .NET System.Globalization Culture Name

Creating the Additional Eight Fields

To fully comply with the Simple Dublin Core metadata element set, the administrator must create the remaining eight Dublin Core fields as standard CMS400.NET Metadata definitions and apply them to all CMS400.NET folders. Next, CMS users complete the appropriate values for each content block.

WARNING! When creating the Dublin Core metadata fields in the Metadata section of the Workarea, you do not need to create the first seven fields in the table above. In addition, the names of the fields you create must match the names below. For example, in the name field, enter "DC.subject". The DC identifies the metadata as Dublin Core metadata.

The remaining eight Simple Dublin Core fields are described below:

NOTE These descriptions are from the Dublin Core Metadata Initiative site. For a more detailed description, visit http://www.dublincore.org.

- **DC.subject** - The topic of the content of the resource. Typically, a Subject is expressed as keywords, key phrases, or classification codes that describe the topic of the resource.
- **DC.type** - The nature or genre of the content of the resource. Type includes terms describing general categories, functions, genres, or aggregation levels for content.
- **DC.source** - A reference to a resource from which the present resource is derived. For example, DC.source=”Image from page 54 of the 1922 edition of Romeo and Juliet”
- **DC.relation** - A reference to a related resource.
- **DC.coverage** - The extent or scope of the content of the resource. Coverage typically includes spatial location (a place name or geographic co-ordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity). Examples: DC.coverage=”1995-1996”, DC.coverage=”Boston, MA”, DC.coverage=”17th century” or DC.coverage=”Upstate New York”.
- **DC.creator** - An entity primarily responsible for making the content of the resource.
- **DC.publisher** - The entity responsible for making the resource available.
- **DC.rights** - Information about rights held in and over the resource. Typically, a Rights element contains a rights management statement for the resource, or reference a service providing such information.

Working with Metadata Definitions

NOTE Only members of the Administrator User Group and those defined in the Manage Members for Role: Metadata-Admin screen can view, add, or edit metadata definitions. *See Also:* ”Using the Roles Screens” on page 796

Procedures for creating, updating and deleting metadata definitions are explained in the following sections.

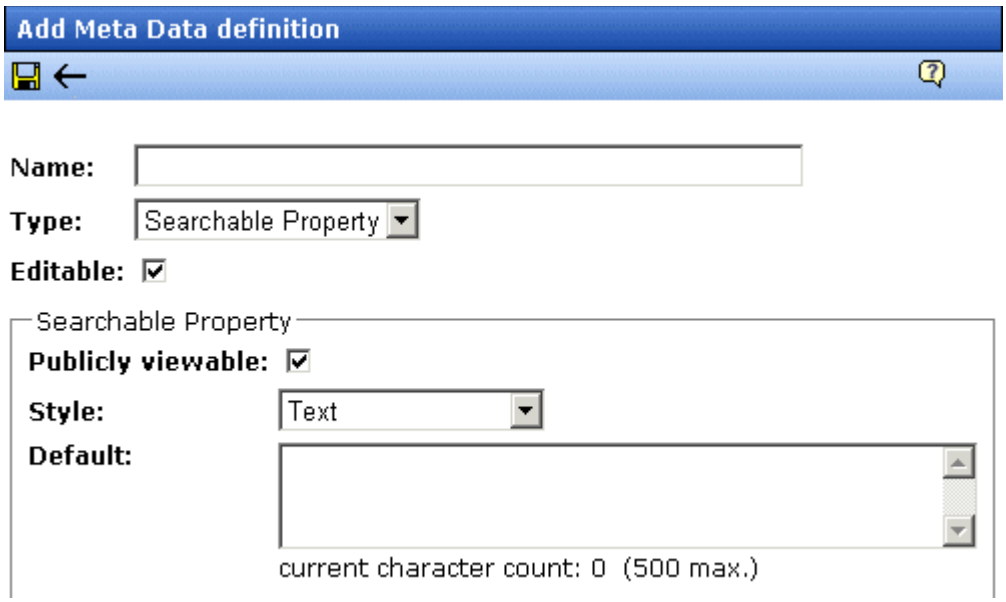
- ”Adding a Metadata Definition” on page 129
- ”Viewing Metadata Definitions” on page 139

- ”Editing a Metadata Definition” on page 139
- ”Deleting a Metadata Definition” on page 140
- ”Assigning Metadata to a Folder” on page 141
- ”Adding Metadata to Content” on page 144

Adding a Metadata Definition

Use the Add Metadata Properties screen to define metadata (such as keywords and title). You can define as many instances of metadata as you wish.

If your site supports multiple languages, you create metadata definitions for each supported language.



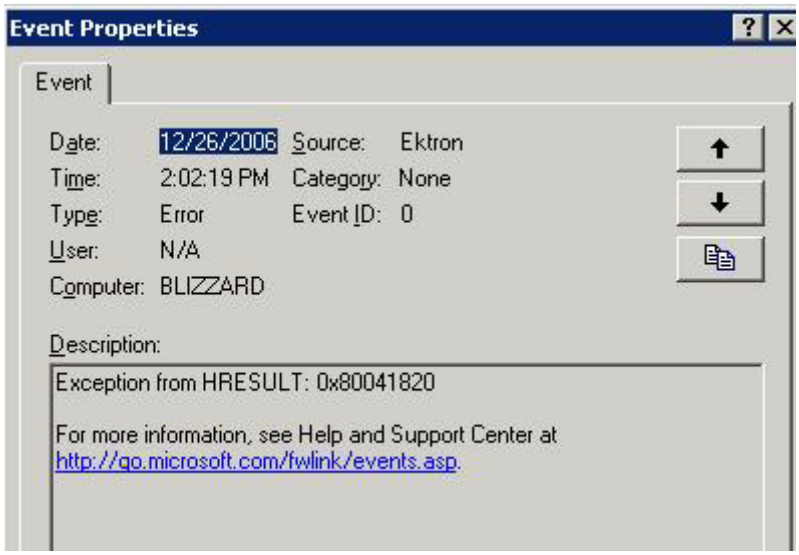
To define one instance of metadata, follow these steps.

WARNING! After creating a definition, you must assign it to all folders whose content should use it. You assign a metadata definition to a folder in the folder’s properties. See ”Assigning Metadata to a Folder” on page 141.

1. From the Workarea’s left frame, click **Settings > Configuration > Metadata Definition**.
2. The View Metadata Definitions screen appears.

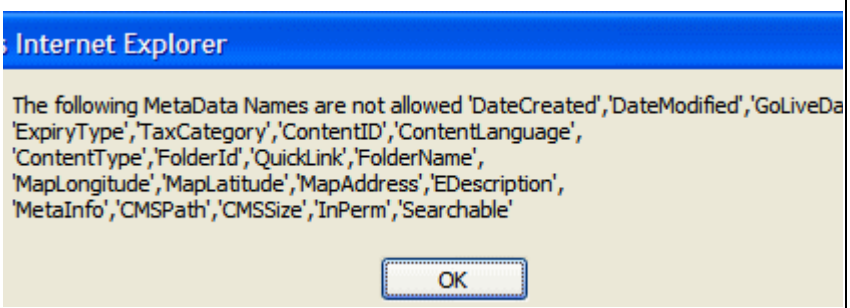
3. Select the language for the metadata you are about to define. This metadata will only be available to content in this language.
4. Click the Add Metadata Definition button ( ).
5. The Add Metadata Definition screen appears. Using the following table, add the needed information.

After you create a metadata definition, you may see the following error in the Windows Event Viewer Log.



To learn more about this problem and how to resolve it, see the following Microsoft KB article: http://support.microsoft.com/kb/310680.

Metadata Definition Fields

Field	Description
Name	Enter a name to identify this metadata. Note: Searchable metadata field names should not include a space. If they do, the search cannot find the metadata. **Ektron CMS400.NET** reserves a list of names that you cannot use. If you enter one of them, the following error message appears when you try to save the definition. 
Type	From the drop-down list, select whether this tag is • a searchable property - *See Also:* "Searchable Additional Fields" on page 133 • an HTML tag (for example, `<title>`) - *See Also:* "HTML Tag Additional Field" on page 131 and "Title Tag" on page 121 • a Meta tag (`<meta>`) - *See Also:* "Meta Tag Additional Fields" on page 132 and "Meta Tags" on page 119 • Collection Selector, ListSummary Selector, Content Selector, Image selector, Hyperlink Selector, File Selector - *See Also:* "Related Content Metadata" on page 123
Editable	Check this box if you want to allow users to edit the contents of the metadata when creating or editing the metadata's content. Uncheck this box if you want uniform metadata text for each content item that uses this metadata.

HTML Tag Additional Field

See Also: "Title Tag" on page 121

Field	Description
Default Text	Enter default content for the HTML tag. For example: `content="document management web content management content management cms"`

Meta Tag Additional Fields

NOTE For background information about metadata, see http://www.w3.org/TR/REC-html40/struct/global.html#edef-META.

See Also: "Meta Tags" on page 119

Field	Description
Style	Select from the drop-down list to indicate whether you want the style to be **name** or **http-equiv**. For more information, see http://www.w3.org/TR/REC-html40/struct/global.html#h-7.4.4.2
Remove Duplicates	Check this box to remove duplicate words or phrases from the metadata.
Case Sensitive	Check this box to remove duplicates only if the letters and case of each letter match.
Separator	Enter a character to separate the metadata values. The default is a semicolon (;).
Selectable Metadata	Check this box to force users to select from the options specified in the **Allow Selectable Text** and **Default Text** fields. If you do not check this box, users can create their own metadata.
Allow Multiple Selections	Check this box to let users select multiple metadata values instead of one. If multiple values are allowed, use the separator character to delimit them. If this box is not checked, all values appears in a drop-down list, and the user selects the correct one. This field is only active if the **Selectable Metadata** box is checked.
Allowed Selectable Text	Enter standard metadata that can be selected by users. Separate each option by the separator specified for the metadata definition. This field is only active if the **Selectable Metadata** box is checked.
Default Text	Enter default content for the metadata tag.

Searchable Additional Fields

Field	Description
Publicly Viewable	If you check the box, site visitors can find the metadata value when searching your Web site. Otherwise, site visitors cannot find the metadata value. Note: Regardless of whether this is checked, this metadata value can be found using the Workarea's Search Content Folder screen. Only logged-in users can access the Workarea.

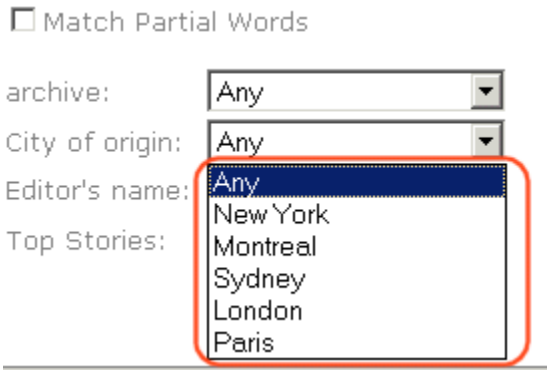
Field	Description
Style	Select the style of the response field from these choices (available in a dropdown list). You are specifying the *kind* of information that a user adding searchable properties to content will enter to describe the data. Later, anyone using the search can search on that information. *See Also:* "Assigning Metadata to a Folder" on page 141 • **Text** - The user enters free text to describe the content. • **Number** - The user enters a number to describe the content. • **Byte** - 1 byte. 0 through 255 (unsigned) • **Double** - 8 bytes. -1.79769313486231570E+308 through -4.94065645841246544E-324 † for negative values; 4.94065645841246544E-324 through 1.79769313486231570E+308 † for positive values • **Float** - (single-precision floating-point) 4 bytes. -3.4028235E+38 through -1.401298E-45 † for negative values; 1.401298E-45 through 3.4028235E+38 † for positive values • **Integer** - 4 bytes. -2,147,483,648 through 2,147,483,647 (signed) • **Long** - 8 bytes. -9,223,372,036,854,775,808 through 9,223,372,036,854,775,807 (9.2...E+18 †) (signed) • **Short** - 2 bytes. -32,768 through 32,767 (signed) • **Date** - The user enters a date to describe the content. • **Yes or No** - The user answers yes or no to describe the content. For example, if the content describes automobile parts, the user could answer **yes** to include new and used parts or **no** to search for new parts only. • **Select from a list** - The user picks a from a list to describe the content. For an illustration of this style on the Edit Content screen/Searchable Properties tab and the Web site search screen, see "Select from a List" on page 136. • **Multiple selections** - The user selects an item from a dropdown list. For an illustration of this style on the Edit Content screen/Searchable Properties tab and the Web site search screen, see "Multiple Selections" on page 136. *See Also:* "Converting the Style of a Metadata Definition" on page 137
Default	If desired, enter the most common response to this definition. The default value is automatically applied to all existing content within folders to which this definition is assigned. While editing content that uses this definition, a user can accept the default value or change it. *See Also:* "Effect of a Default Value on Required Metadata" on page 143

Select from a List

NOTE The following graphics depict searchable metadata when using the Site Search server control. They do not appear when using the Web Search server control.

Appearance on Edit Content Screen > Metadata Tab

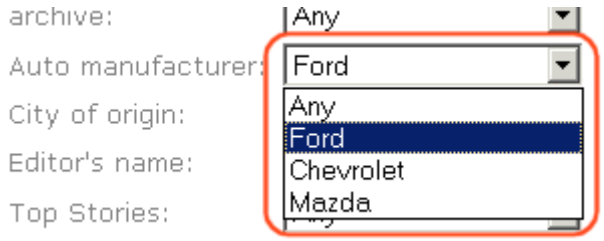
Appearance on Search Screen



Multiple Selections

Appearance on Edit Content Screen > Metadata Tab

Appearance on Search Screen



Converting the Style of a Metadata Definition

This section explains how **Ektron CMS400.NET** handles changing the style of a searchable property type of metadata. For example, you create a definition to collect **Part Number**. Originally, the style is text, but you later decide its style should be number.

When you change the style of searchable property type metadata, **Ektron CMS400.NET** attempts to maintain any data stored in content blocks that use the definition. For example, if the data style was number and you change it to text, the number stored for that metadata definition is converted to text and maintained in all content that uses it.

However, sometimes **Ektron CMS400.NET** cannot maintain the data when you change the style. For example, if you change a metadata definition style from number to date, **Ektron CMS400.NET** cannot convert those styles. In this case, any data stored in metadata definitions is lost.

The following table illustrates all conversion scenarios and how **Ektron CMS400.NET** handles each one. It indicates whether data is maintained after you convert from a data style in the left column to a style to its right.

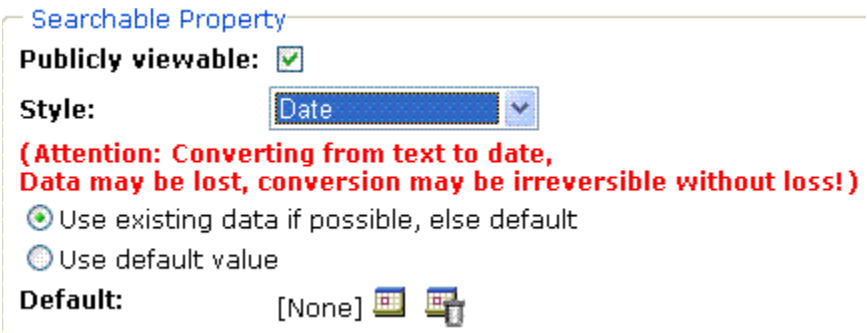
	Text	Number	Date	Boolean	Single Select	Multiple Select
Text	-	OK	OK	NO	NO	NO
Number	OK	-	NO	NO	NO	NO
Date	OK	NO	-	NO	NO	NO
Boolean	OK	NO	NO	-	NO	NO
Single Select	OK	NO	NO	NO	-	OK
Multiple Select	OK	NO	NO	NO	NO	-

Table legend

- **OK** - Data is maintained
- **NO** - Data is lost during conversion

When you change the style of a metadata definition, the screen often gives you these choices:

- Use existing data if possible, else default
- Use default value



Following these choices is a field that lets you define a default value. If you want to simply replace any existing data, select **Use default value** and enter the new value in the **Default** field.

If the data is convertible (according to the table above), and you want to maintain existing data if possible, select **Use existing data if possible, else default**. Then, enter a default value below. If the existing data cannot be maintained, the default value replaces it.

Viewing Metadata Definitions

You may view any metadata definition. To do so, follow these steps.

1. From the Workarea's left frame, click **Settings > Configuration > Metadata Definition**.
2. The View Metadata Definitions screen appears.
3. Select a language from the drop-down list.
4. Click the Metadata definition you want to view.
5. The View Metadata Definition screen appears. From here, you can edit and delete this definition.

See Also: "Metadata Definition Fields" on page 131

Editing a Metadata Definition

NOTE You cannot edit the definition for the following Ektron standard metadata.
* MapLatitude
* MapLongitude
* MapAddress
* MapDate

To edit a metadata definition, follow these steps.

1. Access the View Metadata Definition screen whose definition you want to edit, as described in "Viewing Metadata Definitions" on page 139.
2. Click the Edit button ( ).
3. The Edit Metadata Definition screen is displayed.
4. Make the necessary changes to the definition.

See Also: "Metadata Definition Fields" on page 131

5. Click the Update button ( ).

What Happens When a Metadata Definition is Edited?

If you create a metadata definition, assign it to a folder, then users insert metadata information into their content, the collected information takes on the characteristics of the metadata definition. For example, if the metadata is **title** and its type is **HTML tag**, this is how it appears in the Web page's source code.

```
<title>CMS Developer</title>
```

If you later change its type to **Meta**, the following effects occur:

- metadata to which the definition has *already been assigned* maintains the previous style definition. For example, `<title>CMS Developer</title>`.
- when you create a *new* content item that uses the metadata definition, its metadata takes on the new style. For example, `<meta name="title" content="CMS developer">`.

Deleting a Metadata Definition

You can remove metadata definitions that are no longer used from the Ektron CMS400.NET site. When you delete a definition, it is removed from every content item that uses it.

To delete a definition, follow these steps.

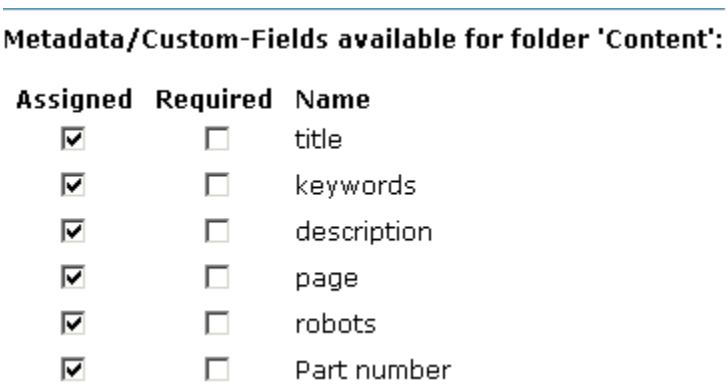
1. Access the View Metadata Definition screen for the definition, as described in "Viewing Metadata Definitions" on page 139.

2. Click the Delete button ( ).
3. A confirmation message is displayed.
4. Click **OK**.
5. Another confirmation message is displayed.
6. Click **OK**.

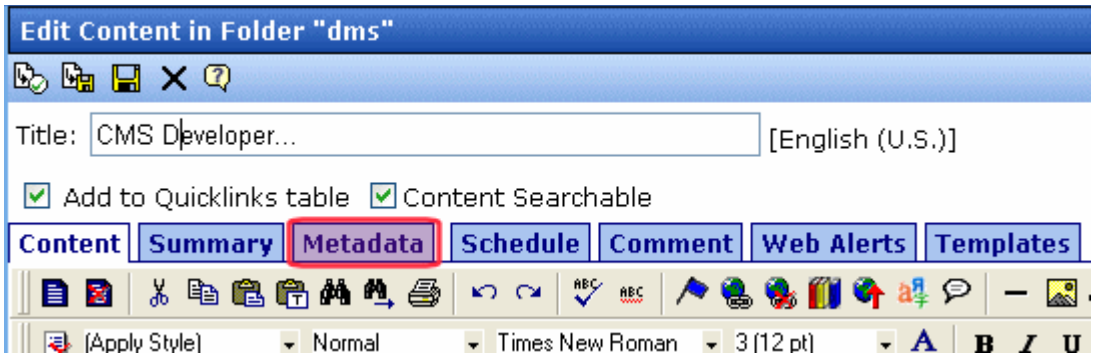
Assigning Metadata to a Folder

After creating a metadata definition (see "Adding a Metadata Definition" on page 129), assign it to folders whose content will use it.

On each folder's properties screen, you determine which metadata definitions can be used.The section of the folder properties screen used to assign metadata appears below. Only metadata definitions whose **Assigned** box is checked can be completed by users working with content in the folder.



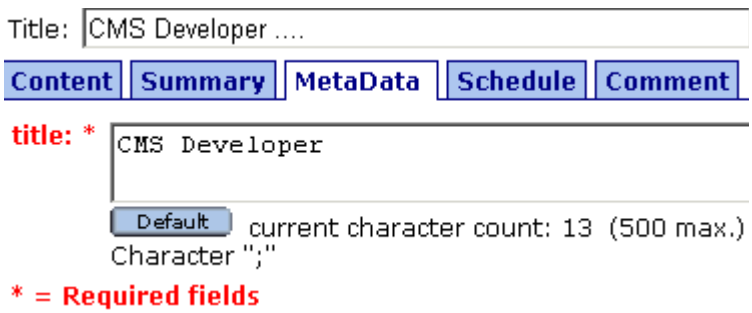
Then, while creating or updating content, the user can insert the metadata information via the Metadata tab (illustrated below).



Requiring Users to Enter Metadata

You can determine that a metadata value *must* be inserted before content can be saved (see the **Required** checkboxes in the illustration above). This occurs both when new content is added and existing content is edited.

If you set a kind of metadata to be required, its label is red and includes an asterisk (*) on the **Metadata** tab of the Edit Content screen, as shown below.



If the user does not complete a required metadata field, a message informs him that it must be completed before he can save the content.

Effect of a Default Value on Required Metadata

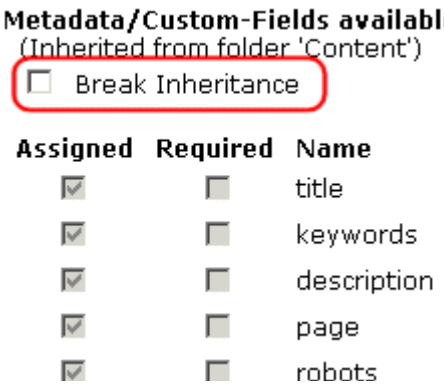
A default value can be defined when creating or editing a field within a metadata definition. *See Also:* "Adding a Metadata Definition" on page 129

If a default value is defined for a required metadata field, the default value is used when the user saves the content. In this case, the user is not prompted to enter a value because the default value is sufficient.

Inheritance of Metadata by Folder

Each folder can inherit metadata fields from its parent folder or have a unique set of them. The information includes the kinds of metadata that are *assigned* and which of those are *required*. For example, you could assign the top folder (Content) all metadata definitions, while you assign the Contacts folder (directly below it) none.

On every folder's **Metadata** tab, use the **Break Inheritance** check box (illustrated below) to determine if metadata definitions are the same as the parent folder or unique.



By default, **Break Inheritance** is not checked, which means that all folders inherit metadata definitions from the root folder (Content).

When you check **Break Inheritance**, all inherited values appear by default (that is, **Assigned** and **Required** boxes are either checked or unchecked). You can then change the settings as desired.

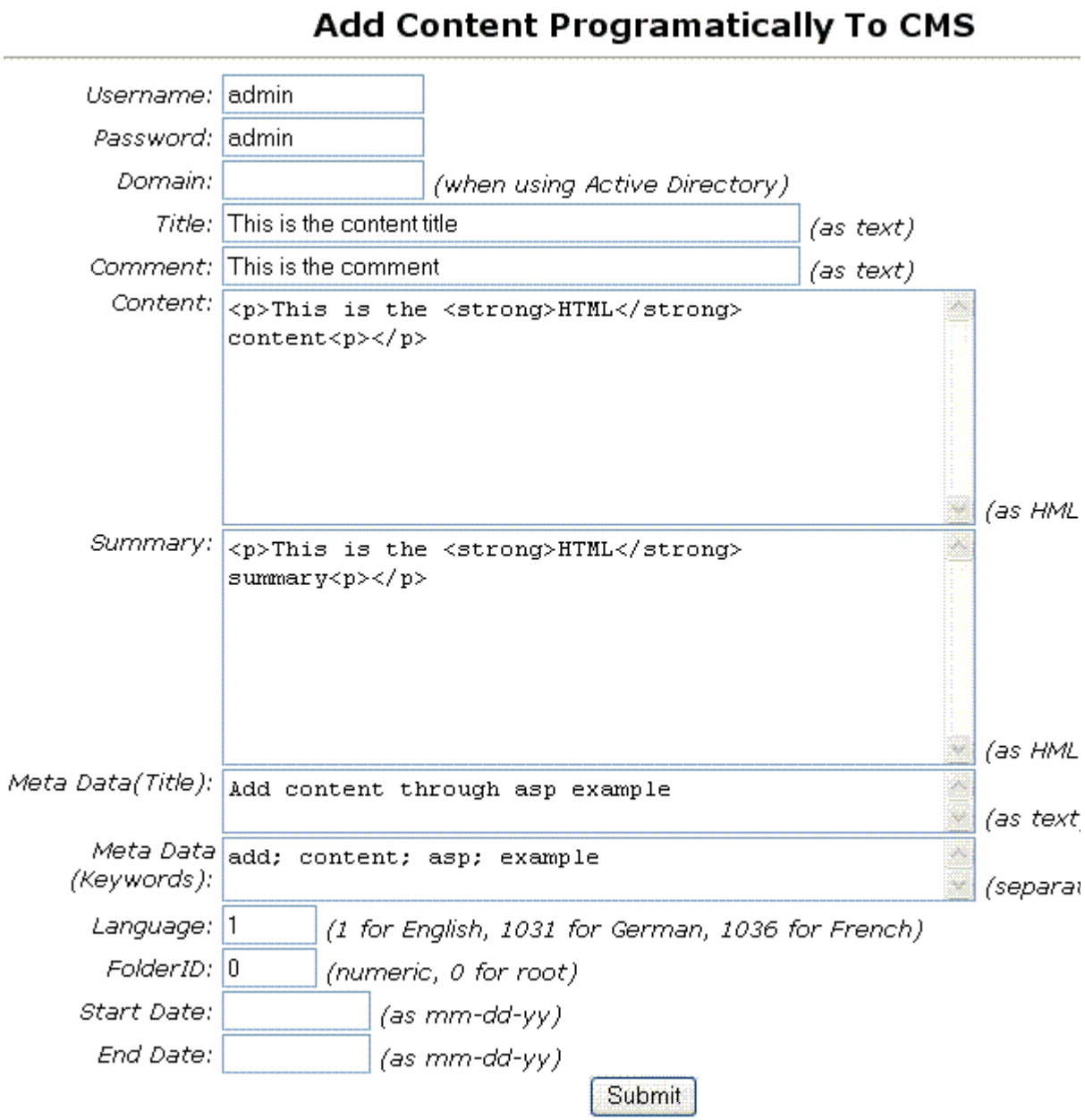
Adding Metadata to Content

When a user creates or updates content, he can define its metadata within the assignments specified for its folder.

Default metadata values are applied without user intervention. Instructions for adding metadata are found in the Adding or Editing Data Metadata section of the **Ektron CMS400.NET** User Manual.

Adding Content Programmatically

Content can be created using a special function which lets users add new content without logging in. To accomplish this, your Web site developer places a form on your Web site which lets users submit content without logging in. Here is a sample Add Content form.


Add Content Programatically To CMS
Username: admin
Password: admin
Domain: (when using Active Directory)
Title: This is the content title (as text)
Comment: This is the comment (as text)
Content: This is the HTML content (as HML
Summary: This is the HTML summary (as HML
Meta Data(Title): Add content through asp example (as text
Meta Data (Keywords): add; content; asp; example (separat
Language: 1 (1 for English, 1031 for German, 1036 for French)
FolderID: 0 (numeric, 0 for root)
Start Date: (as mm-dd-yy)
End Date: (as mm-dd-yy)
Submit

Your Web site developer can customize this form to better suit your needs. See the Ektron CMS400.NET Developer Manual for additional information.

Content Reports

The reports folder contains several reports to help you manage the workflow of content through **Ektron CMS400.NET**. In most cases, you choose a report that corresponds to the content's status, then view all content in that status. If appropriate, you can perform tasks on selected content. For example, you can check in checked-out content.

This chapter explains how to access the reports folder in your Workarea, set criteria that determine the information on the reports, and actions you can perform on them.

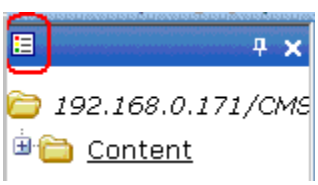
See Also:

- "Accessing the Reports Folder" on page 147
- "List of Standard Reports" on page 148
- "Common Report Topics" on page 149

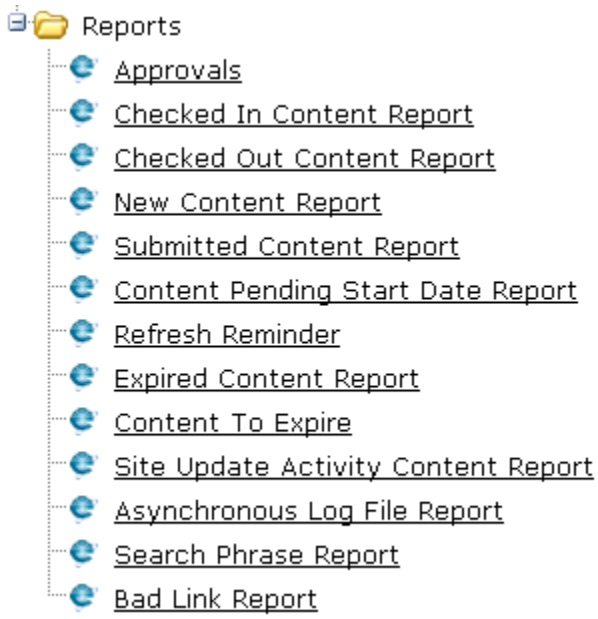
Accessing the Reports Folder

To access the Reports folder, follow these steps.

1. From the Ektron CMS400.NET Workarea, click the Smart Desktop button in the top left corner (circled below).



2. Click the **Reports** folder.
3. A list of available reports appears.



NOTE The Approvals, Checked Out, and Content to Expire Reports are also available from the Workarea.

The reports are described below.

List of Standard Reports

Report	Displays content in this status	For more information, see
Approvals	Requiring your approval	"Approvals Reports" on page 157
Checked In Content	Checked in	"Checked In Report" on page 159
Checked Out Content	Checked out	"Checked Out Report" on page 160
New Content	New (that is, created and saved but never published)	"New Content Report" on page 161

Report	Displays content in this status	For more information, see
Submitted Content	Submitted for publication	”Submitted Report” on page 161
Content Pending Start Date	Approved and pending a start date	”Content Pending Start Date Report” on page 162
Refresh Reminder Report	End date has been reached	”Refresh Reminder Report” on page 163
Expired Content	Expired date has been reached	”Expired Content Report” on page 164
Content to Expire	Will expire within specified number of days	”Content to Expire Report” on page 165
Site Update Activity Content Report	Content created or updated in selected folders and within a selected date range	”Site Update Activity Report” on page 166
Asynchronous Log File Report	A log report of the Asynchronous process	”Asynchronous Log File Reporting” on page 1035”
Search Phrase Report	Frequency of search terms	”Search Phrase Report” on page 170
Preapproval Groups	User groups that have been assigned to folders in order to preapprove content	”Preapproval Groups Report” on page 375
Bad Link Report	Invalid links to external URLs	”Bad Links Report” on page 172

Common Report Topics

The following topics apply to the reports.

- ”Information on the Reports” on page 150
- ”Report Toolbar Options” on page 150
- ”Selecting Content by Folder” on page 151
- ”Selecting Content by Type” on page 152
- ”Sorting and Filtering Content Reports” on page 152
- ”Performing an Action on Several Content Items” on page 153
- ”Viewing/Editing Content on the Report” on page 154

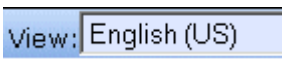
- ”emailing Reports” on page 154

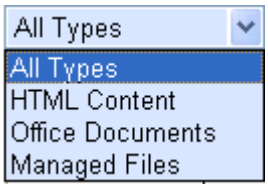
Information on the Reports

Each report displays the following information about its content.

Field	Description
Title	Title of content.
ID	Internal number assigned to content by **Ektron CMS400.NET**.
Date Modified	If a Start Date was assigned to the content, it appears here.
Last Editor	The user who last edited the content.
Path	Folder location of content.

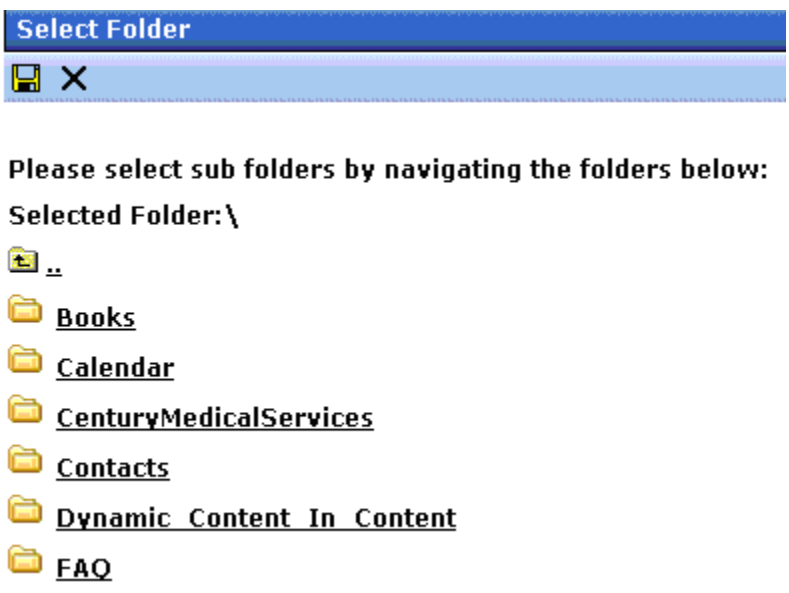
Report Toolbar Options

Toolbar Button	Description	For more information, see
	email this report to selected users	”emailing Reports” on page 154
	Select a folder whose content appears on the report. Content in other folders is ignored.	”Selecting Content by Folder” on page 151
	Go to previous screen	
	Select the language of the content you want to see on the report	

Toolbar Button	Description	For more information, see
	Select the type of the content you want to see on the report	

Selecting Content by Folder

You can select a folder and only view the content in that folder that satisfies the other report criteria. For example, the Checked in Content Report can show only content whose status is checked in and which resides in the Contacts folder.



Only content in the selected folder appears. The report does not include content from subfolders of the selected folder.

To select content by a folder, follow these steps.

1. From the Smart Desktop, select a report.
2. Click the Select a Folder button ( ).

3. The top level folders appear.
4. If the folder you want is on the list, click the corresponding checkbox.

   If the folder you want is a subfolder, click the parent folder's name. A new screen appears, showing the selected folder's subfolders. Click the corresponding checkbox.

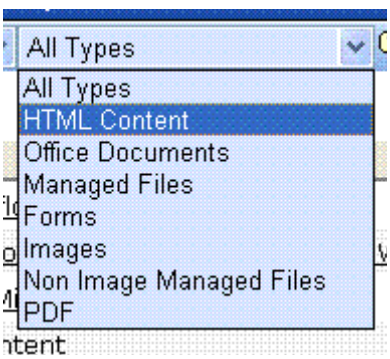
5. Click the Save button ( ) to finalize your folder selection.
6. The screen displays all content items in the selected folder that satisfy all report criteria.

Selecting Content by Type

After viewing any report, you can select a content type and only view the content of that type that satisfies the other report criteria. For example, the Checked in Content Report can show only Office documents.

To select a content type, follow these steps.

1. From the Smart Desktop, select a report.
2. Use the file types pull-down to select a file type.
3. The screen refreshes and only displays files of that type.



Sorting and Filtering Content Reports

Upon viewing a report's content, you have additional options for filtering report data by user and content folder.

The filtering options for each content report are identical. The following section uses the Checked-In Content report as an example.

Filter by User

To display only content that was checked in by a user, click the name of the user in the report display. When you do, the report redisplays, showing only content which that user checked in.

Filter by Content Folder

To display only content checked in to a selected folder, click the folder on the report display. When you do, the report redisplays, showing only content in that folder.

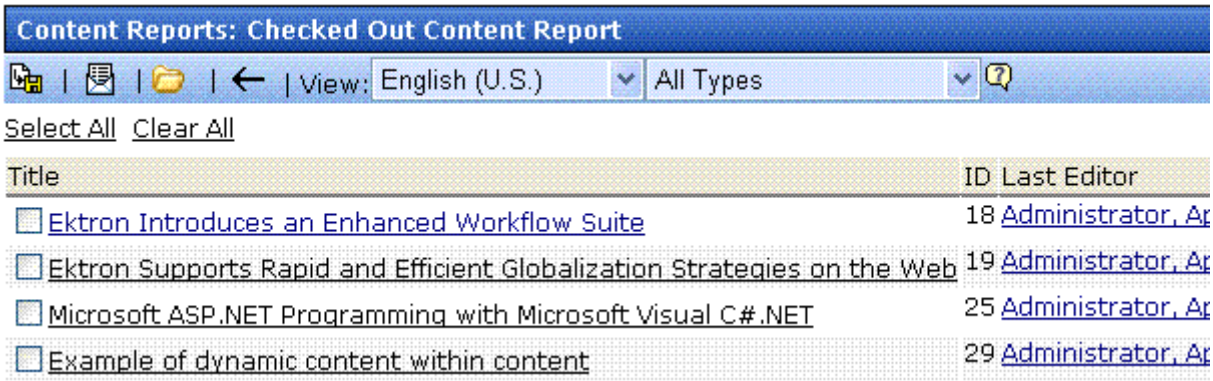
NOTE You can also select a folder and view reports in that folder only. *See Also:* "Selecting Content by Folder" on page 151

Performing an Action on Several Content Items

You can perform the following actions on several or all content items in the Approvals, Checked in, and Checked out reports.

Report	Action you can perform
Approvals	Approve
Checked in	Submit for publication
Checked out	Check in

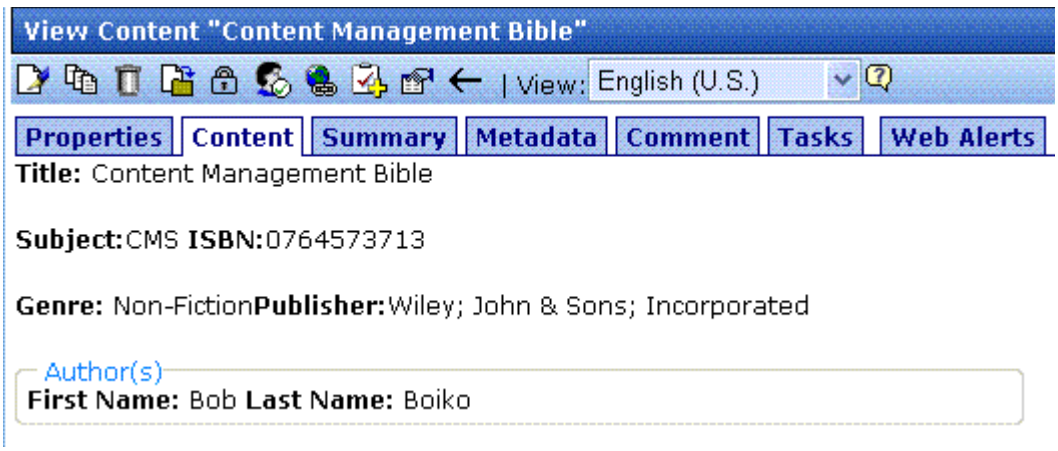
To select several reports, check the relevant checkboxes (illustrated below). To select all reports, click **Select All**.



Then, click the button at the top left to perform the action on the selected content items.

Viewing/Editing Content on the Report

To view (and possibly edit) any content on a report, click it. It appears on the View Content screen (illustrated below).



The View Content screen provides several toolbar options that you can perform on the content.

emailing Reports

You can email any report. You might do this, for example, to notify a user that several content items are checked out to him. All

information in the report appears in the email. A sample appears below.

Content To Expire in 70 Days
tsmith@ektron.com

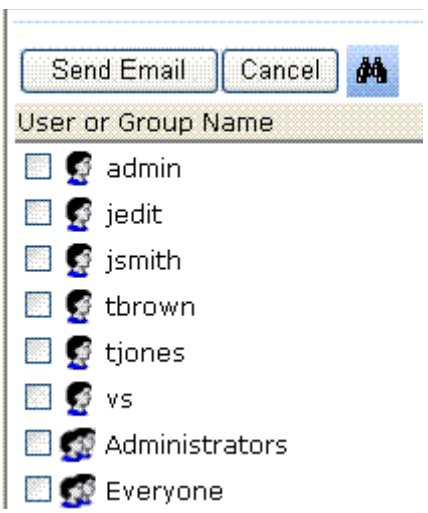
To: tsmith@ektron.com

Title	ID	Last Editor	Email	End Date	Pa
CMS Developer	12	Edit, John		11/13/2005 9:45:00 PM	\
CMS Entwickler ...	12	Administrator, Application		11/13/2005 9:45:40 PM	\
CMS Ralisateur ...	12	Administrator, Application		11/13/2005 9:45:40 PM	\

You can click any content item on the report and proceed to that page of your Web site.

To email any report, follow these steps.

1. Display the report you want to email.
2. Click the email button ( ).
3. A list of all users and user groups in your **Ektron CMS400.NET** appears.



NOTE Users appear first in alphabetical order (by username), followed by user groups. The icon for user groups has two heads (see below).

4. Click inside the checkbox of every user or group to receive a copy of the report.

Searching for Report Recipients

If you cannot easily find a user, a search of all users and groups is available. To use it, follow these steps.

1. Display the report that you want to email.
2. Click the email button ( ).
3. A list of all users and user groups in your **Ektron CMS400.NET** appears.
4. Click the Search for User button ( ).
5. The following screen appears.

6. Enter whatever information you know about the users.
7. Click the **Send email** button.
8. All users that satisfy the search criteria appear on a new screen.

9. Click the checkbox of every user or group to receive the report.

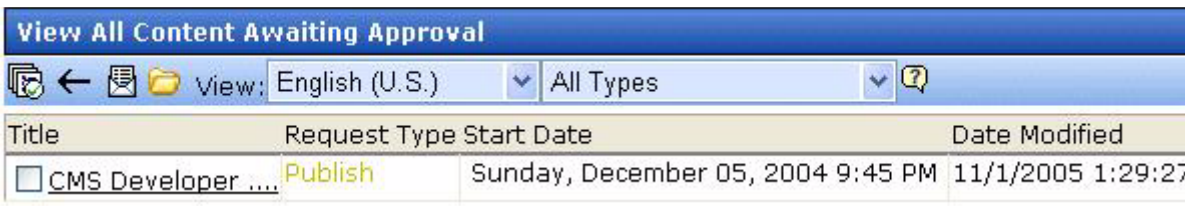
Approvals Reports

Each content item awaiting your approval appears on this report. Thus, you can quickly find all such content without searching through every folder.

The View All Content Awaiting Approval screen displays the following information about this content.

Field	Description
Title	Title of content.
Request Type	Request made for the content. Either **Publish** or **Delete**.
Start Date	Start date, if any, assigned to the content. Determines when content will go live on Web site.
Date Modified	Date the content was most recently changed
Submitted By	User who submitted content for approval.
ID	The ID number if the content.
Language	The language of the content.
Path	Path to content folder where content resides.

Below is an example of the View All Content Awaiting Approval screen.

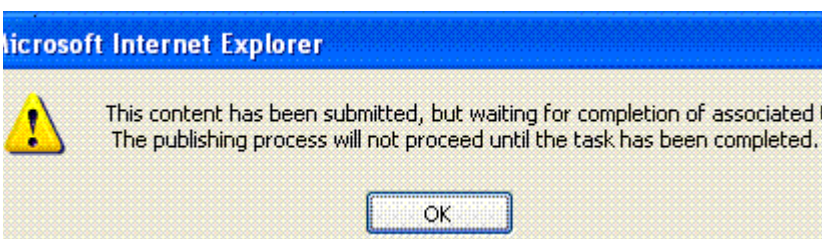


Approving/Declining Content

From the approvals report, you can approve or decline content that was submitted to you. The steps below explain how to do so.

Approve/Decline One Content Item

1. Access your Approvals report in the Workarea (see "Approvals Reports" on page 157).
2. Click the content you want to approve or decline.
3. The View Content Awaiting Approval page is displayed.
4. Perform an action using the following table as a reference.

Button	Name	Description
	Publish	Accept changes to content and publish it to site. Note: If there is a subsequent approver in the content's approval chain, this button is replaced by a Submit button. If you click **Publish** but the content item has an incomplete task assigned to another user, the content cannot be published. Instead, the following error message appears.  The user to whom the task is assigned must complete it before you can publish the content.
	Decline	Reject changes and keep current version of content live on Web site. You are prompted to enter a comment that provides a reason for the decline. The author who made the change is notified by email of the decline. The content inserted by the last editor remains in the file. If you do not want it to remain, choose the **Edit** option.
	Edit	Check out content and make changes to it if desired.

Button	Name	Description
	View Published/ Staged	Toggle between published and submitted versions of content. This can help you compare differences.
	Back	Go back to previous screen.

Approving Multiple Content Items

See "Performing an Action on Several Content Items" on page 153.

The selected content is either submitted to the next publisher, published immediately, or deleted, depending on the content's approval chain.

Checked In Report

The Checked In Content report displays all the content currently in a checked-in status.

The report displays the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.

Column	Description
Path	Folder location of content in Ektron CMS400.NET Web site.

Submitting Multiple Content Items

After selecting content, use the submit toolbar option ( ) to submit it for approval or publication, depending on your position in the approval chain.

Checked Out Report

The Checked Out Content report displays all content currently in a checked out status.

The report displays the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

After selecting content, check it in using the Checkin button ( ).

New Content Report

The New Content report displays content in a *new* state, that is, it was created and saved but never published. The new content report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

Submitted Report

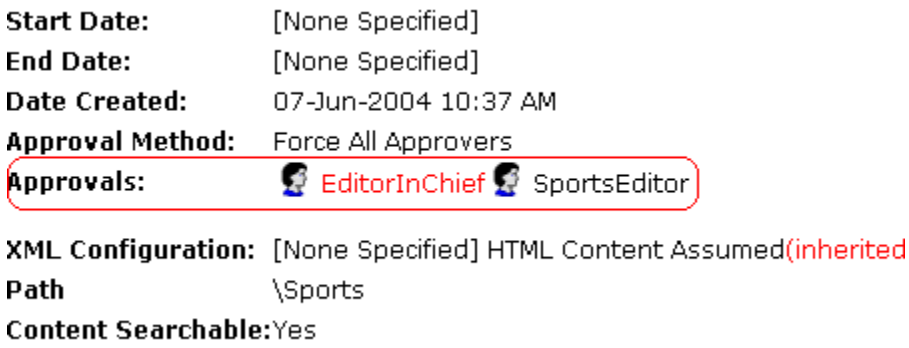
The Submitted Content report displays all content in a submitted state. The report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time content was last edited.
Path	Folder location of content in Ektron CMS400.NET Web site.

Viewing Position in Approval Chain

While viewing the Submitted Content report, you can view the content's position is its approval chain. You can use this information to contact the individuals in the chain and ask them to complete their approval. To do so, follow these steps.

1. From the Submitted Content Report, click the content's title.
2. The View Content page is displayed.
3. Click the **Properties** tab.
4. The content's position in the approval chain is indicated by red text on the **Approvals** line.


Start Date: [None Specified]
End Date: [None Specified]
Date Created: 07-Jun-2004 10:37 AM
Approval Method: Force All Approvers
Approvals: EditorInChief SportsEditor
XML Configuration: [None Specified] HTML Content Assumed(inherited
Path \Sports
Content Searchable:Yes

Content Pending Start Date Report

The Pending Start Date Report displays all content that was approved, but whose start dates haven't occurred. Each content item on the report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Start Date	Date and time content will go live on Web site.

Column	Description
Path	Folder location of content in Ektron CMS400.NET Web site.

Editing Content with a Pending Start Date

You may edit content on the Pending Start Date Content report. To do so, follow these steps.

1. Click the content you want to view.
2. The View Content page is displayed.
3. Using the toolbar at the top of the page, perform any action available.

Refresh Reminder Report

The Refresh Report displays all content whose end date has passed and whose archive option is set to **Refresh Report**. This content is still visible on the Web site. Its appearance on this report indicates that it is due for review. *See Also:* The **Ektron CMS400.NET** User Manual section “Scheduling Content to Begin and End” >“Setting Archive Options.”

Each item on the report contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
Date Modified	Date and time the content was last updated.
Path	Folder location of content in Ektron CMS400.NET Web site.

Removing Expired Content from Site

If you review content and decide it should no longer appear on your site, follow these steps to remove it. The content will be visible if you browse to it through the Workarea, but won't appear to site visitors.

1. From the Expired Content Report, click the content.
2. From the View Content screen, click the Edit button ( ).
3. Click the **Schedule** tab.
4. Under **Action on End Date:**, click **Archive and remove from site (expire)**.

Expired Content Report

The Expired Content report displays all content whose end date has passed. Such content is no longer visible on the Web site.

Each item on the list contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
End Date	Date and time the content expired.
Path	Folder location of content in Ektron CMS400.NET Web site.

Editing Expired Content

You may edit any content on the Expired Content report. To do so, follow these steps.

1. Click the content you want to view.
2. The View Content page is displayed.
3. Using the toolbar at the top of the page, perform any action available.

Content to Expire Report

The Content to Expire report lists all content whose end date will occur between today and a number of days that you specify. For example, if today is January 1 and you select 10 days, the report lists all content whose end date is January 1 through January 10.

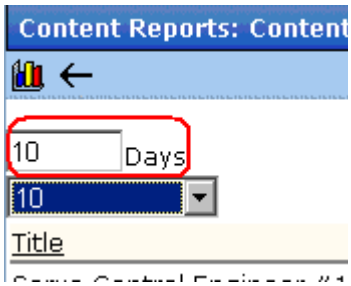
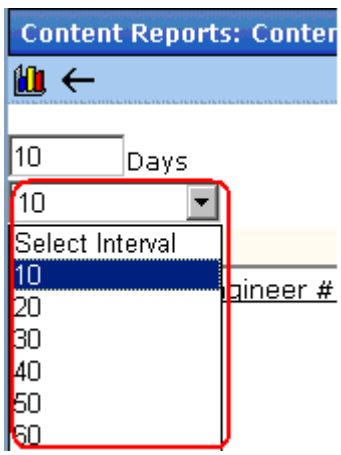
After viewing the report, you can click any content and proceed to the View Content screen for it. From there, you can edit information about it, including its end date if desired.

Each item on the list contains the following information.

Column	Description
Title	Title of content.
ID	ID number assigned to content by Ektron CMS400.NET.
Last Editor	Last user to edit the content.
End Date	Date and time the content expired.
Path	Folder location of content in Ektron CMS400.NET Web site.

Selecting the Report's Date Range

To select the report's date range, you have two options:

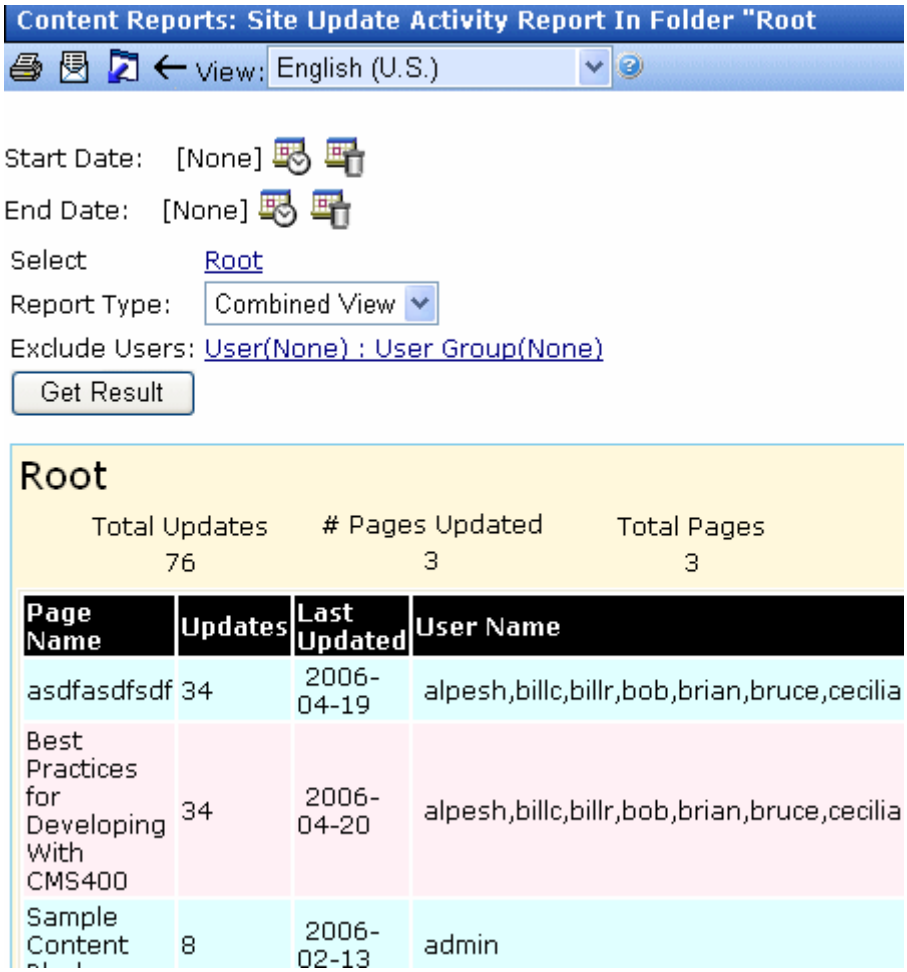
Option	Illustration
Enter a number in the **Days** field. Then click the View Reports button ( ).	
Select a number from the dropdown list below the **Days** field	

After selecting a number of days, click the view icon ( ) to see all content that will expire within that time frame.

Site Update Activity Report

The Site Activity Report provides a snapshot of the freshness of the content on your Web site. Specifically, it lists how many content items were published within a folder and date range you select, broken down by folder.

A sample report appears below.



Selecting Information to Appear on the Report

To choose which content items will appear on the report, follow these steps.

1. By default, only content in the default language appears on the report. To change the language, use the language pull-down near the top of the screen.

2. Choose a **Start Date** by clicking the calendar icon ( ).

3. A calendar appears. You can move to another month or year by clicking it. When you get to the desired month, click inside the day. The selected date turns red (see below).

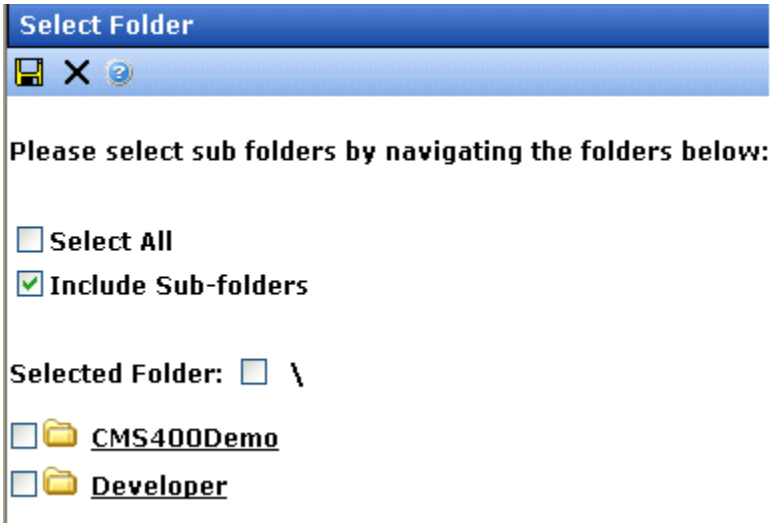
4. Click **Done**.
5. If desired, select an **End Date** using the same procedure.

NOTE If you do not select an end date, the report uses today as the end date.

6. At the **Select** field, choose a folder. The Root folder is the default selection.

NOTE Only folders for which you have read-only or greater permission appear.

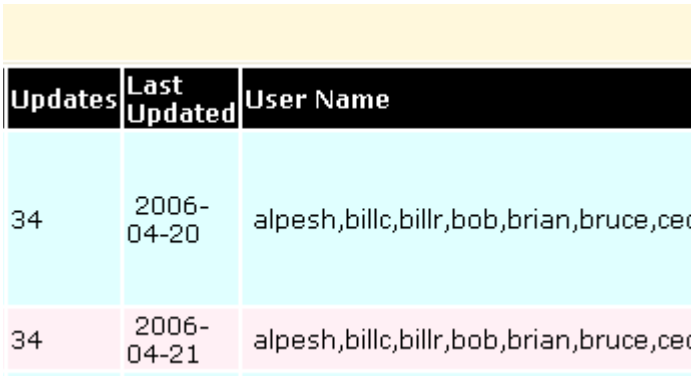
To change that selection, click the folder name. When you do, the Select Folder screen appears.



To select all folders on the screen, click the **Select All** checkbox. Otherwise, select folders by clicking the corresponding checkbox. There is also an option to **Include Sub-folders** of the selected folders.

7. Choose the Report type, which determines the information you will see on the report. Options are explained below.

Report Type	Description	Example
Executive View	• folder name • how many times content in folder was published • how many pages were published • number of content items in folder	Root Total Updates: 110 # Pages Updated: 4 Total Pages: 4

Report Type	Description	Example
Detail View	• name of each page that was published • how many times it was published • date it was last published • users who published page • total numbers are *not* provided	
Combined View	information from Executive and Detail views	

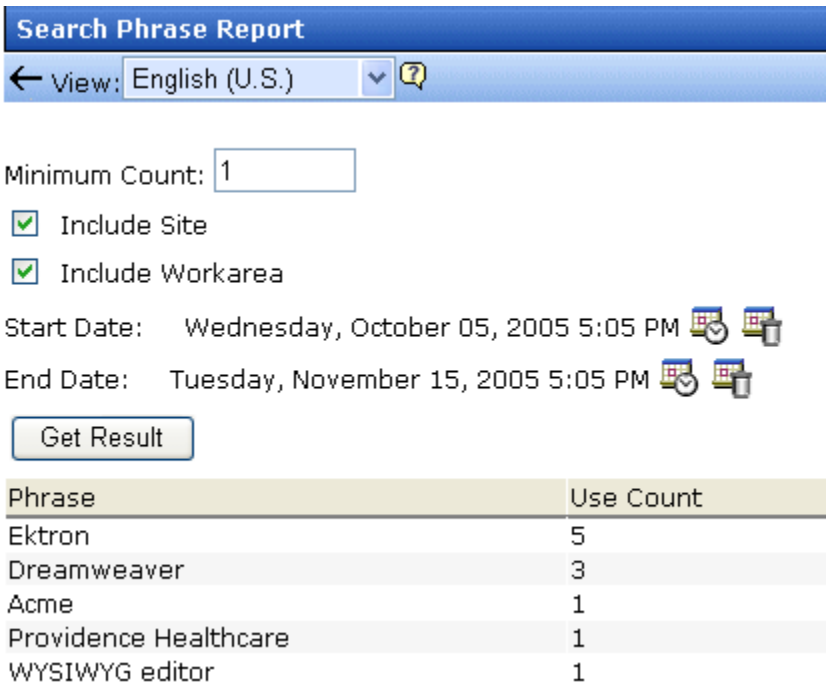
Updates	Last Updated	User Name
34	2006-04-20	alpesh,billc,billr,bob,brian,bruce,ce
34	2006-04-21	alpesh,billc,billr,bob,brian,bruce,ce

8. If you would like to exclude users or use groups from the report, use the **Exclude Users** field. For example, you want to see all updates other than those you have completed.

   When you click **Exclude Users**, an alphabetical list of users appears, followed by user groups. (User groups have a two-headed icon (Administrators)).
9. Click **Get Result**.

Search Phrase Report

This report displays all terms that were entered into the Search Text Field within a selected range of dates. You can use it to discover the kind of information site visitors are searching for.



Selection Criteria

You can narrow down the search by selecting any combination of these criteria.

- language - the language of the *search page* (either Workarea or Web site search). The user performing the search can choose a language before inserting the search text. If he does not explicitly choose a language, the search uses the default one. This report can show results from all languages or any one that you select.
- a *minimum number of occurrences* of the word or phrase to return. For example, you only want words or phrases entered into the **Search Text** field at least 10 times during the last month.
- whether to include words or phrases entered into the *Web site search* (the search page that site visitors use)
- whether to include words or phrases entered into the *Workarea search* (accessed from the View Contents of Folder screen, this search page is used by authorized CMS users to find content)

- date range

Display of Search Results

The search results show the number of times each word or phrase that satisfies the selection criteria appears. They are arranged in this order.

- words or phrases with the most occurrences appear first
- if several words or phrases have the same number of occurrences, they are arranged alphabetically

Also, terms entered into the Web site search or the Basic Workarea search are surrounded by parentheses (). Terms entered into the Advanced Workarea search have no parentheses. The Microsoft search engine uses this syntax to find content.

Bad Links Report

The Bad Links Report notifies you of any invalid links to external URLs within your content. (An invalid link returns an error code to your browser.)

NOTE The report does not check quicklinks embedded in the content.

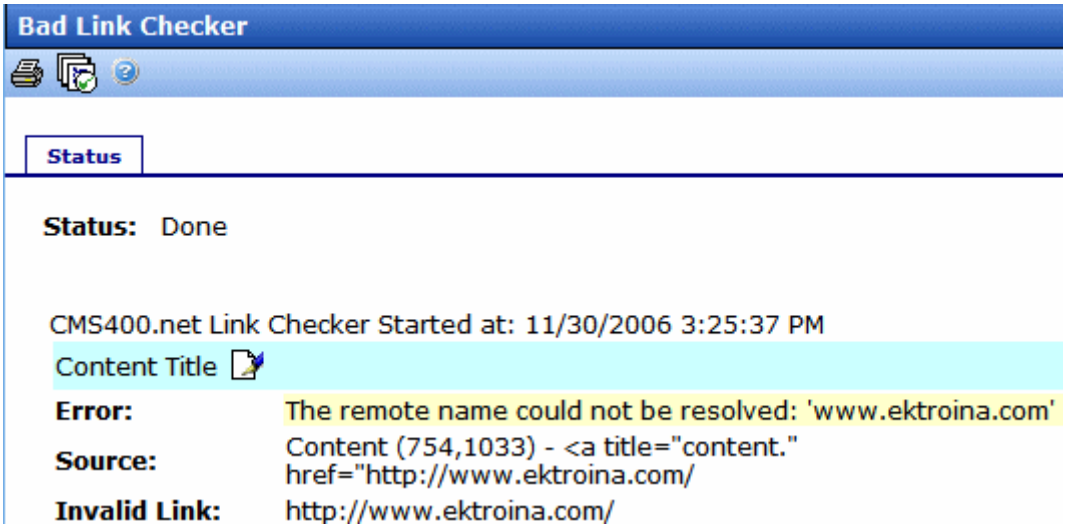
To accomplish this, the report scans the following types of content.

- published HTML content
- published XML content
- HTML forms
- XML Smart Forms
- menus
- active system templates

When the scan is complete, the report lists any item that includes an invalid URL. From the list, you can click a button to access the item, then update or remove the bad link.

Running the Bad Links Report

To run the Bad Links Report, go to **Smart Desktop > Reports**. When you select Bad Link Report, you immediately see its status, either Done or Running.



To begin scanning for bad links, click the Check Links Now button ( ). When you do, existing data is replaced by new data being collected as the report progresses.

While the report scans content, you are free to work in other areas of **Ektron CMS400.NET**. You can even sign off **Ektron CMS400.NET**. These actions have no effect on the report's collection of data.

If you want to stop the Bad Links Report at any time, click the Cancel button ( ).

After all content is scanned, the report's status changes to **Done**. If desired, you can print the report by clicking the print button ( ).

You can also launch the broken link in a browser by moving the cursor over it then clicking when the cursor turns into a hand.

Fixing Errors

The report lists the following information about each item that contains a bad link.

- title
- error description
- Source, that is, item type (content, menu, etc.) followed in parentheses by information about the item that has the error.

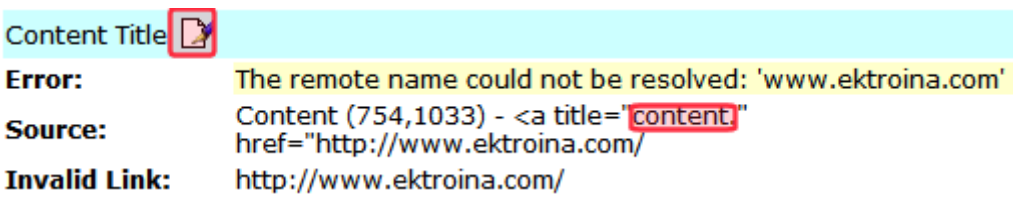
  As examples

  - if the error is in a content block, you see **Content** followed by its id number and language locale id
  - if the error is in a Smart form, you see **Smart form** followed by its ID number
  - If it's a menu, you see **Menu Item (11,0,1033)**. The three parameters are menu ID, menu item ID, and language ID.
  - An error in a template looks like this:

```
ASPX Template (therapies.aspx)

Invalid Link: http://localhost/websrc/WorkArea/therapies.aspx
```

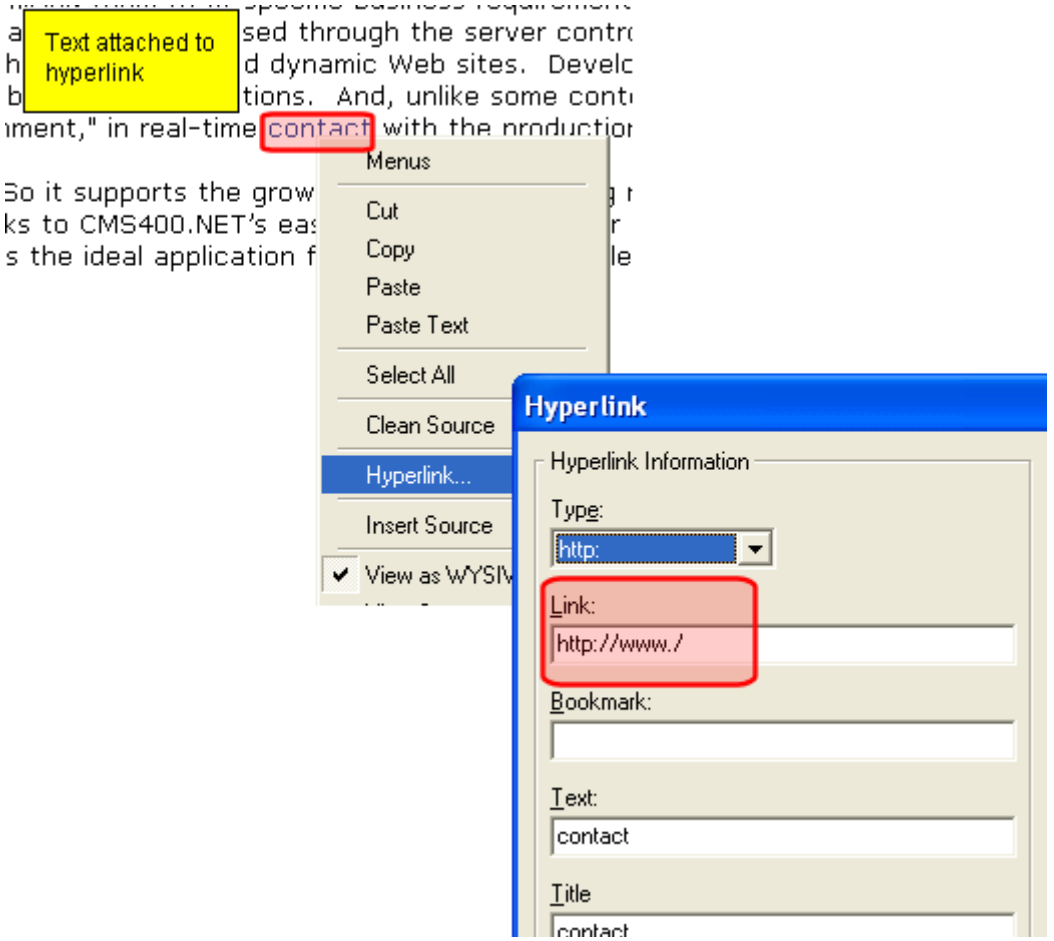
  - The beginning of the bad link's source code. Use this to help you find the bad link from Source View.
- the anchor (<a>) tag to which the bad link is assigned
- URL that could not be resolved (labeled **Invalid Link**)

To fix an error, click the edit button next to the title (highlighted below). The item opens in edit mode, so you can fix the bad link.



The error report's **Source:** field also indicates the text to which the bad link is assigned. See **content** highlighted in the above graphic.

Within the content, you select the indicated text, right click the mouse, and select **Hyperlink** to access the hyperlink dialog. From here, you can update or remove the bad link.



Running the Bad Links Report on a Schedule

You can set the Bad Links Report to run in the background at predetermined times. If you do, you can view the report's latest results at your convenience without having to wait while it compiles.

To set up a schedule, follow these steps.

1. Open the following configuration file:

```
C:\Program Files\Ektron\EktronWindowsservice30\Ektron.ASM.EktronServices.exe.config
```

2. Within that file, go to the following line:

```
<add name="RunJob" type="Ektron.ASM.EktronServices.RunCMSJobManager.JobService,
Ektron.ASM.EktronServices" AbsoluteTime="Weekly|5, 2:27:00 PM"  Enabled="true" />
```

3. Use the `absoluteTime` property to set the Bad Links Report's start time and frequency. By default, the report is scheduled to run every Thursday at 2:27 p.m. The following table lists ways to indicate a schedule.

Frequency	How to indicate	Example
Hourly	Comma-separated list of integers representing the number of minutes, seconds and ms between jobs	360,0,0 (every 360 minutes or 6 hours)
Daily	A time in hh:mm:ss AM/PM format	11:30:00 PM (every day 11:30 pm)
Weekly	**Weekly |** followed by an n is an integer that corresponds to a day of the week, followed by time. Use the time format described for the Daily frequency. Use zero (0) to indicate Sunday, 1 for Monday, etc., through 7 for Saturday.	Weekly| 0 12:00:00 PM (every Sunday at noon)
Monthly	**Monthly |** followed by an integer that corresponds to a day of the month, followed by time. Use the time format described for the Daily frequency. Use zero (0) to indicate Sunday, 1 for Monday, etc., through 6 for Saturday.	Monthly| 15 11:30:00 (the 15th of every month at 11:30 PM)

Managing Library Items

Before users can insert images and files into their content, they must be uploaded to the server that contains **Ektron CMS400.NET**. Each user, depending on their permissions, can upload images and files through the library in their Workarea.

In the library, you determine the types of files that can be uploaded and each user's library permissions.

What's In This Chapter?

This chapter assumes you are familiar with the Library Folder chapter of the **Ektron CMS400.NET** User Manual. As a result, the chapter only provides information that is unique to administrators.

The following topics are covered in this chapter:

- "Library Folders and Permissions" on page 177
- "Folder Properties" on page 178
- "Performing Actions on Library Items" on page 180
- "Library Load Balancing" on page 180

Library Folders and Permissions

Whenever a new content folder is created and permissions given to it, a corresponding library folder is created. The new folder inherits permissions from the content folder.

Items added to library folders are only accessible by users with permission to the corresponding content folder. If items are added to a library folders directly under the main library folder, all users with at least library Read-Only permissions can use those library items in their content.

Conversely, if a library item is uploaded to a folder to which only one person has permissions, that is the only user who can use that library asset.

Folder Properties

The library folder properties contains library-related information, including load balance settings, image and file types that are allowed to be uploaded, as well as other settings.

The following buttons indicate actions you can perform on a library folder.

Button	Description	For more information, see
	Folder properties	”Accessing the Library Properties Screen” on page 178
	Search	Ektron CMS400.NET User Manual section “Library Folder” > “Searching the Library”
	Back to previous screen	

Accessing the Library Properties Screen

As an administrator, you have permission to change the library properties. To view the properties of the library folder, follow these steps.

1. Access a library folder, as explained in ”Folder Properties” on page 178.
2. Click the Properties button ( ).
3. The Library Management window appears, displaying the following settings.

The Library Management Settings

Field	Description
Image Extensions	The types of image files that a content contributor can upload to the library. You can add as many image file extensions as you want, or have none. If no extensions appear, no one can upload image files to the specified folder.
Image Upload Directory	Specifies where the uploaded images are saved on the Web server. By default, the image upload directory is `Web root/ek_sitepath/uploadedimages`. The `ek_sitepath` value is set in the Web.config file. *See Also:* **Ektron CMS400.NET** Setup Manual section "Managing the web.config File."
Make Directory Relative to this Web site	If you want to specify the image upload directory's location as relative to your Web site root, check this box. (Your Web site root's location appears to the right of **Make Directory Relative to this Web site**.)
File Extensions	Specify the types of non-image files that a content contributor can upload to the library. You can add as many non-image file extensions as you want, or have none. If no extensions appear, no one can upload non-image files to the specified folder.
File Upload Directory	Specifies where the uploaded files are saved on the Web server. By default, the file upload directory is `Web root/ek_sitepath/uploadedfiles`. The `ek_sitepath` value is set in the Web.config file. Note: You must create the directory in your Web root manually, before adding it in CMS400.NET. *See Also:* **Ektron CMS400.NET** Setup Manual section "Managing the web.config File."
Make Directory Relative to this Web site	If you want to specify the file upload directory's location as relative to your Web site root, check this box. (Your Web site root's location appears to the right of **Make Directory Relative to this Web site**.)

Editing Library Properties

To edit library properties, follow these steps.

1. Go to the Library Properties screen, as explained in "Accessing the Library Properties Screen" on page 178.
2. Click the Edit button ( ).

Library properties are described in "The Library Management Settings" on page 179.

Performing Actions on Library Items

The library is made up of images, files, form Quicklinks, hyperlinks, and regular Quicklinks that were added by Ektron CMS400.NET users. The following table displays the actions that can be performed for each library item type.

Action	Files	Images	Hyperlinks	Quicklinks	Form Quicklinks
Add	✓	✓	✓	✓	✓
Edit	✓	✓	✓	✓	✓
View	✓	✓	✓	✓	✓
Overwrite	✓	✓			
Delete	✓	✓	✓	✓	✓
Remove from server	✓	✓			
Check links	✓	✓	✓	✓	✓
Update URL			✓	✓	✓

Most actions can be performed by a user who is granted permission to do so. *See Also:* "Setting Permissions" on page 776

Library Load Balancing

See "Load Balancing Library Images and Files" on page 1068

Working with Smart Forms

WARNING! **Ektron CMS400.NET** does not support the use of eWebEdit400 to create and edit Smart Form configurations. You must use eWebEditPro+XML. However, eWebEdit400 is the default editor for creating/editing *content* based on a Smart Form.

Ektron CMS400.NET's Smart Forms give you access to the power of XML by separating Web content from presentation. In addition to hiding the XML tags from users, Ektron CMS400.NET can serve content to various presentation devices (PDAs, mobile phones, etc.), saving users from the tedium of creating duplicate content. Review and revision are drastically reduced because the accuracy and format of your Web content are managed using XML schema validation.

Using Smart Forms with Ektron CMS400.NET provides the following benefits:

- Strictly enforce content and page layout with Ektron's editor (Ektron eWebEditPro+XML), XSLT, and WYSIWYG templates for content contributors
- Deliver content to multiple devices (e.g., PDAs, mobile phones, etc.)
- Easily share content across B2B transactions
- Advanced XML authoring: Ektron's highly-acclaimed XML editor—Ektron eWebEditPro+XML—lets developers hide XML tags from content contributors and provides an easy-to-use WYSIWYG editing interface

The following are examples of industries that can benefit from XML Indexing.

Industry	Use XML indexing to find
Health Care	A cardiologist whose practice is located in your city

Industry	Use XML indexing to find
Human Resources	Sick time policy
Real Estate	A house with a zip code of 03031 priced under $200,000
Hospitality	A hotel in Boston
Online Retail	Fleece gloves for men
Educational	A course in .NET programming

Smart Forms are used in Ektron CMS400.NET to define the necessary files to display, save, and validate the content properly. This section explains how to take advantage of Ektron CMS400.NET's Smart Forms.

See Also:

- "Benefits of Using XML Data" on page 182
- "Before You Manage Smart Forms" on page 183
- "Adding a New Smart Form" on page 185
- "Assigning Smart Forms" on page 191
- "Viewing Smart Forms" on page 191
- "Editing Smart Forms" on page 196
- "Creating Smart Forms Based on Existing Configurations" on page 199
- "Viewing Data Designer XSLTs" on page 200
- "Deleting Smart Form Configurations" on page 201
- "XML Indexing" on page 203

Benefits of Using XML Data

This section explains why you should use XML as opposed to HTML content for your Web site. Because of XML's advantages, Ektron recommends using XML content whenever possible. Below are several reasons why XML is the preferred format for managing content.

- **Standardized format for capturing content**
  - You can create an XML Smart Form then require anyone creating content in a folder to use the form. The result is more uniform and consistent information.
  - Within an XML Smart Form, you can require authors to complete fields in a specified format. So, for example, if you want the author to enter a date, XML can ensure that it's captured in a standard format. Several standard formats are provided (email address, zip code), and you can create your own.
- **Superior control over content display**
  - Authors contribute XML content but have virtually no control over its format. The Web administrator determines the format through an XSLT file. By customizing the XSLT, you can exert maximum control over your Web site's appearance.
  - Since one file controls several (even hundreds of) pages, you can update just that file to efficiently change the look of all pages whose content is based on the Smart Form.
- **Improved search capabilities**
  - Because XML data is captured in individual fields, you can focus a search on relevant fields. For example, if your XML content captures data about books, you can place an author search on your Web site. Since that search only looks through content in the **Author** field, it is much faster and returns more reliable results than a search of HTML content.

Before You Manage Smart Forms

You must define each Smart Form that will be used in your Web site. Each form is assigned to a content folder or content item and lets you specify how XML content appears in the editor, is validated, and is displayed in an output device.

There are two ways to create a Smart Form.

- Using external XML files
- Using the WYSIWYG Data Designer

This section explains how to create and manage Smart Forms using both methods.

The Smart Form Toolbar

During the process of creating and managing Smart Forms, several toolbar buttons are available. The following table describes the buttons and their actions.

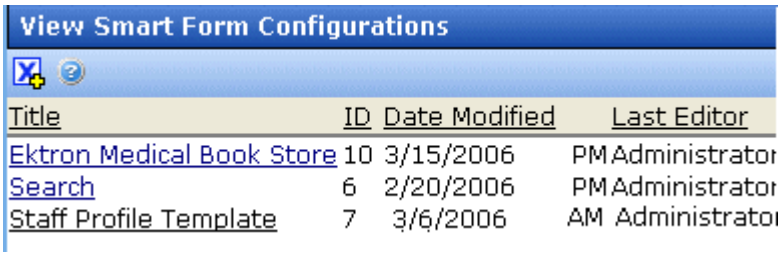
Button	Name	Description	More Information
	Add Smart Form	Create a new Smart Form from scratch or based on properties of an existing one	"Adding a New Smart Form" on page 185
	Back	Return to previous screen	
	Delete	Delete a Smart Form	"Deleting Smart Form Configurations" on page 201
	Edit	Edit a Smart Form created with external files	"Editing Smart Forms" on page 196
	Edit Data Design	Edit a Smart Form created with the Data Designer	"Editing Data Design Packages" on page 196
	Save	Save changes	
	Update	Save and update changes	
	View XSLT	Display the XSLT for a Smart Form	"Viewing Data Designer XSLTs" on page 200

Accessing Smart Forms

NOTE Only members of the Administrators group or those defined in Manage Members for Role: Smart Forms Admin screen can create or edit Smart Forms. *See Also:* "Defining Roles" on page 795

To access the Smart Form section of the Workarea, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. The View Smart Forms screen is displayed.



From here, you can view, add, edit, and delete Smart Forms.

- *See Also:* "Working with Smart Forms" on page 181

Adding a New Smart Form

When adding a new Smart Form, you have two options. The following sections explain both.

- "Adding a Smart Form Using the Data Designer" on page 185 (recommended)
- "Adding a Smart Form Using External XML Files" on page 187 (for example, XSLTs, schemas, etc.)

Note

To create a new Smart Form by copying and editing an existing one, see "Creating Smart Forms Based on Existing Configurations" on page 199.

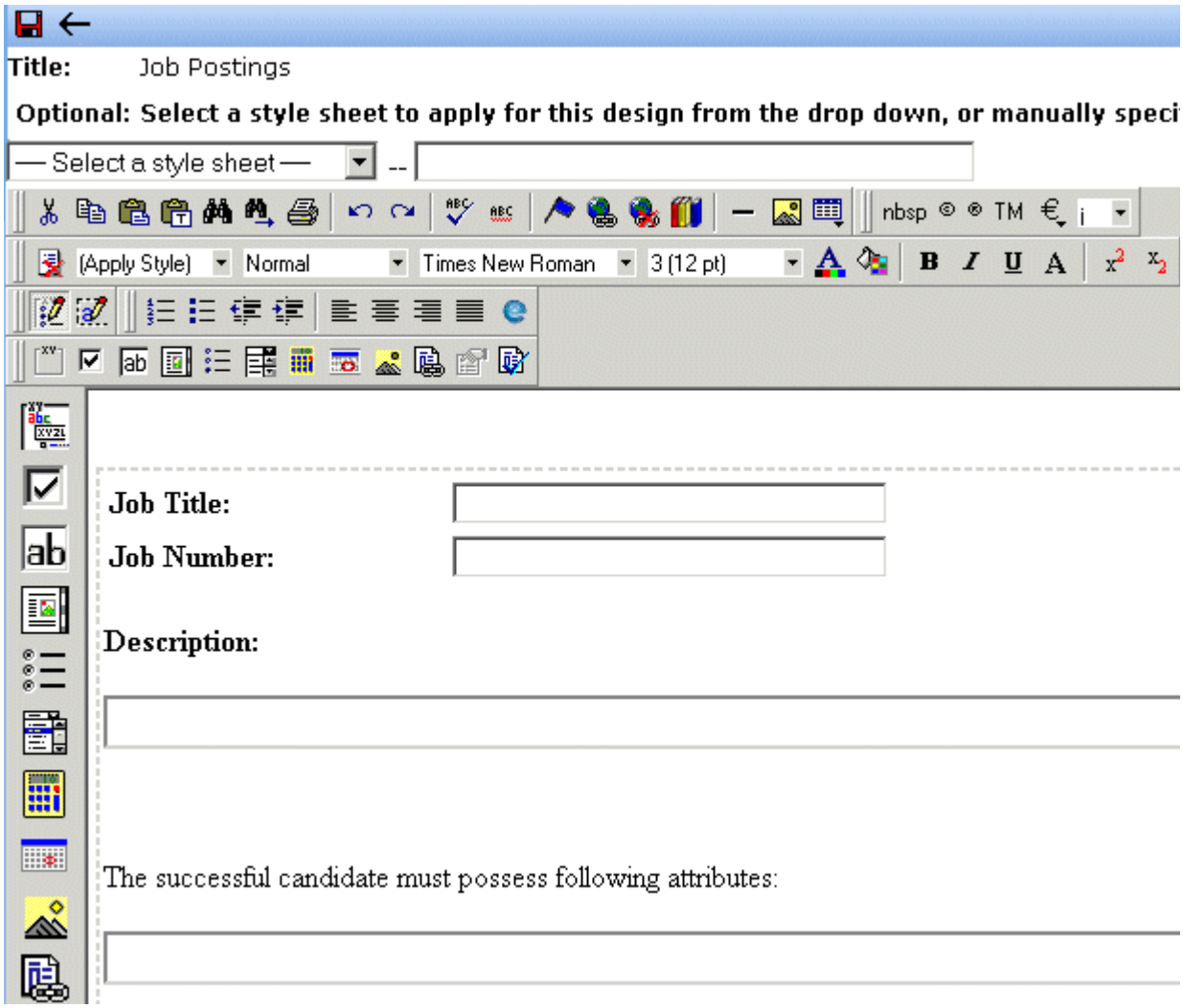
Adding a Smart Form Using the Data Designer

To add a Smart Form using the WYSIWYG Data Designer, follow these steps.

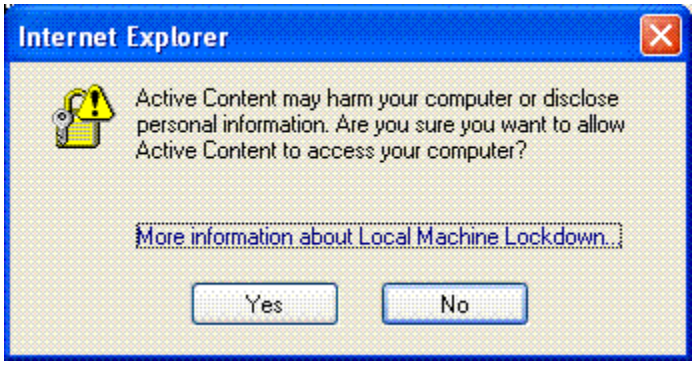
1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Add Smart Form button ( ).
3. The Add Smart Form screen is displayed.

4. Enter a **Title** for the Smart Form.
5. Click the Save button ( ).
6. The Smart Form Data Designer screen appears.

NOTE Ektron CMS400.NET checks to see if eWebEditPro+XML is installed on your computer. If it is not, you are prompted to install it.



7. You may get the following error dialog.


Internet Explorer
Active Content may harm your computer or disclose personal information. Are you sure you want to allow Active Content to access your computer?
More information about Local Machine Lockdown...
Yes
No

To learn about why the dialog is appearing and help decide whether to click **Yes** or **No**, click the link **More information about Local Machine Lockdown**. A Windows Help topic appears and explains your options.

8. If desired, you may specify a style sheet for the Smart Form. Use the field on the right above the editor.

   To do so, either type the path and file name of the CSS file, or select an Ektron CMS400.NET-registered style sheet from the drop down list.

9. Design your XSLT in the Data Designer.

   See "Using the Data Designer with eWebEditPro +XML" on page 209 for information about creating XSLTs using the Data Designer.

10. Click the Update button ( ).

You are ready to assign the Smart Form to a folder or content item. See "Assigning Smart Forms" on page 191 for more information.

Adding a Smart Form Using External XML Files

WARNING! Release 7.5.2 and up of Ektron CMS400.NET supports two editors: eWebEditPro+XML and eWebEdit400. If you want users to insert Smart Form information using eWebEdit400, you cannot create or edit Smart Forms using external files. You must create and edit them using Ektron CMS400.NET's Data Designer.

To add a Smart Form using external XML files, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Add Smart Form button ( ).
3. The Add Smart Form screen is displayed.
4. Enter a **Title** for the Smart Form.
5. Click the Save button ( ).
6. The Smart Form Data Designer screen is displayed.
7. Click the Back arrow ( ) to exit.
8. The View Smart Form screen for the new Smart Form is displayed.

Title:	Test using external XML files
ID:	18
Description:	
Editor Information:	
Edit XSLT:	
Save XSLT:	
Advanced Configuration:	
Validation Information:	
XML Schema:	
Target Namespace:	

9. Click the Edit button ( ).
10. The Edit Smart Form screen is displayed.
11. Enter the necessary information using the following table as a reference.

Smart Form Fields

Section	Field	Description
Generic Information	Title	Name given to Smart Form.
	ID (display only)	ID number assigned when configuration is created.
	Description	Detailed description given to configuration by its creator or last editor.
Editor Information	Edit XSLT	XSLT applied to content while being edited.
	Save XSLT	XSLT used to transform the XML when saved to the database.
	Advanced Configuration	XML file that contains display information, schema validation, and other advanced XML data.
Validation Information	XML Schema	The .xsd file used to validate the XML content
	Target Namespace	The default namespace used for outgoing XML
DIsplay Information	XSLT1	XSLT 1 applied to XML data when viewed on a device
	XSLT2	XSLT 2 applied to XML data when viewed on a device
	XSLT3	XSLT 3 applied to XML data when viewed on a device
	XSLT Packaged	XSLT package applied to XML data when viewed on a device

NOTE When a Smart Form is created using the Data Designer, a default display XSLT is created which resembles the edit XSLT created in the editor. This default XSLT can be applied to the XML content.

12. Specify the default display XSLT for the configuration by clicking the corresponding radio button.

13. Click the Save button ( ).

XML File Verification

A verification button ( ) appears to the right of some fields on the Add Smart Form screen. After you identify an XSLT or schema, you can click this button to verify that the file:

- exists in the location specified
- contains well-formed XML

NOTE The XML Verification feature does *not* validate the contents of the XML file.

The following table explains possible results when clicking the verification button.

Display	Result	Description
	Verified	The file passes all verification parameters
	Not Verified	The file either: • Does not exist in the specified location • Does not contain well-formed XML Review current settings. Ensure the file is in the proper location, and that it contains well-formed XML

Assigning Smart Forms

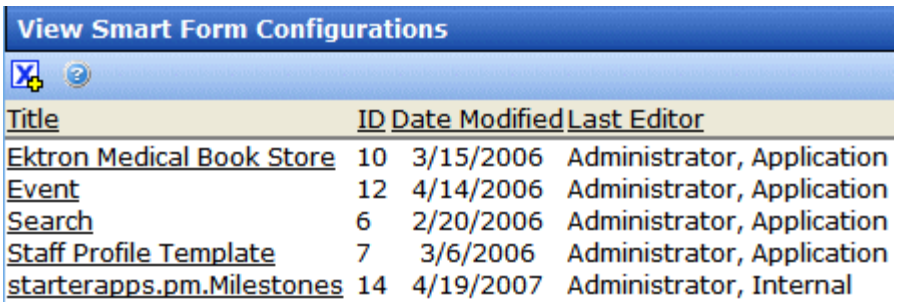
After you create a Smart Form, you can assign it to a folder's Properties screen. (*See Also:* "Smart Forms" on page 57) Content in the folder can then use the configuration.

A Smart Form can be inherited from a parent folder, or you can assign a different one.

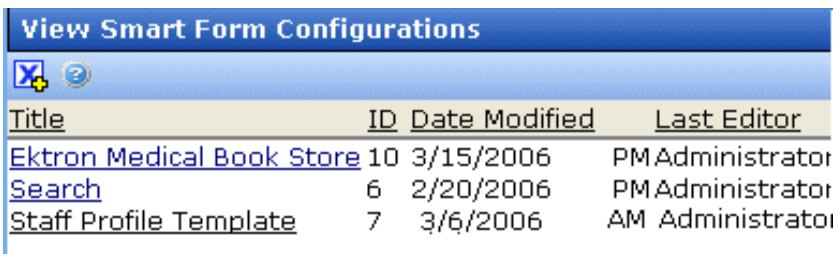
Viewing Smart Forms

To view a Smart Form, follow these steps.

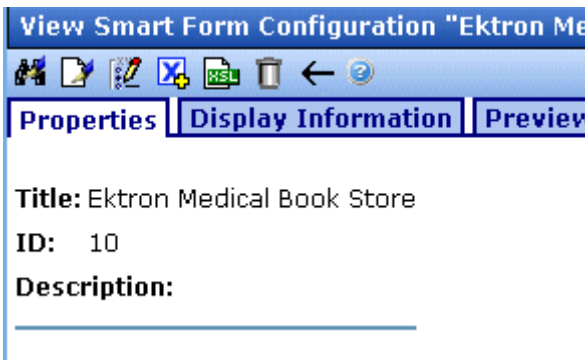
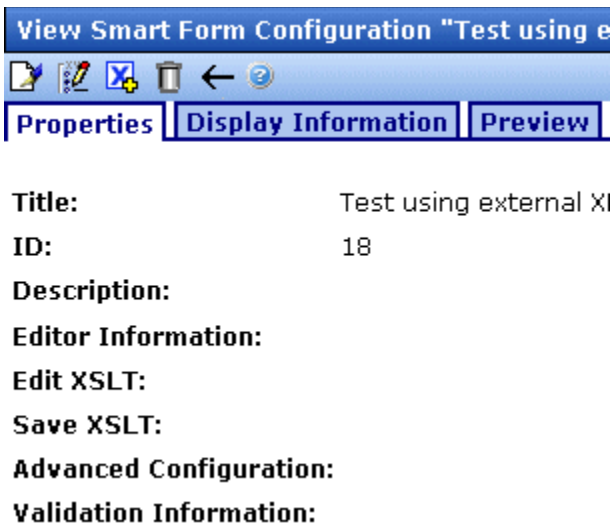
1. In the folder tree on the left side of the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the form you want to view.


View Smart Form Configurations
Title ID Date Modified Last Editor
Ektron Medical Book Store 10 3/15/2006 Administrator, Application
Event 12 4/14/2006 Administrator, Application
Search 6 2/20/2006 Administrator, Application
Staff Profile Template 7 3/6/2006 Administrator, Application
starterapps.pm.Milestones 14 4/19/2007 Administrator, Internal

.


View Smart Form Configurations
Title ID Date Modified Last Editor
Ektron Medical Book Store 10 3/15/2006 PM Administrator
Search 6 2/20/2006 PM Administrator
Staff Profile Template 7 3/6/2006 AM Administrator

The View Smart Forms screen appears with a more detailed description of the configuration.

Smart Form Created with...	
Data Designer	**External Files**
	

The View Smart Form screen has three tabs.

- "Properties Tab" on page 193
- "Display Information Tab" on page 196
- "Preview Tab" on page 195

Each tab is explained below.

After viewing, you can perform the following actions on the Smart Form.

Button	Name	Description	More Information
	Configure Full Text Search	Edit search screen labels	”Editing Smart Forms” on page 196
	Edit	Edit a Smart Form	”Editing Smart Forms” on page 196
	Edit Data Design	Open Data Designer	”Editing Data Design Packages” on page 196
	Add Smart Form	Create a new Smart Form from scratch or based on an existing one	”Adding a New Smart Form” on page 185
	View XSLT	Display a Smart Form’s XSLT	”Viewing Data Designer XSLTs” on page 200
	Delete	Delete a Smart Form	”Deleting Smart Form Configurations” on page 201
	Back	Return to previous screen	
	View online help	View online help	

Properties Tab

Field	Description
Title	Name given to Smart Form.
ID	ID number assigned by Ektron CMS400.NET upon creation of the configuration.
Description	Detailed description of configuration given by creator or last editor.

If the Smart Form was created using external XML files (instead of the Data Designer), the following information also appears:

- ”Editor Information” on page 194
- ”Validation Information” on page 194

Editor Information

NOTE This section only appears if you do not use the Data Designer to create your Smart Form.

The editor information contains the file names of the XSLTs used when editing and adding content in the editor.

Field	Description
Edit XSLT	XSLT applied to the content when being edited. Note: If no edit XSLT is specified, the Edit Data Design option is enabled in the toolbar.
Save XSLT	XSLT used to transform the XML created in the editor when the Smart Form is saved to the database.
Advanced Configuration	XML file that contains display information, schema validation, and other advanced XML data.

Validation Information

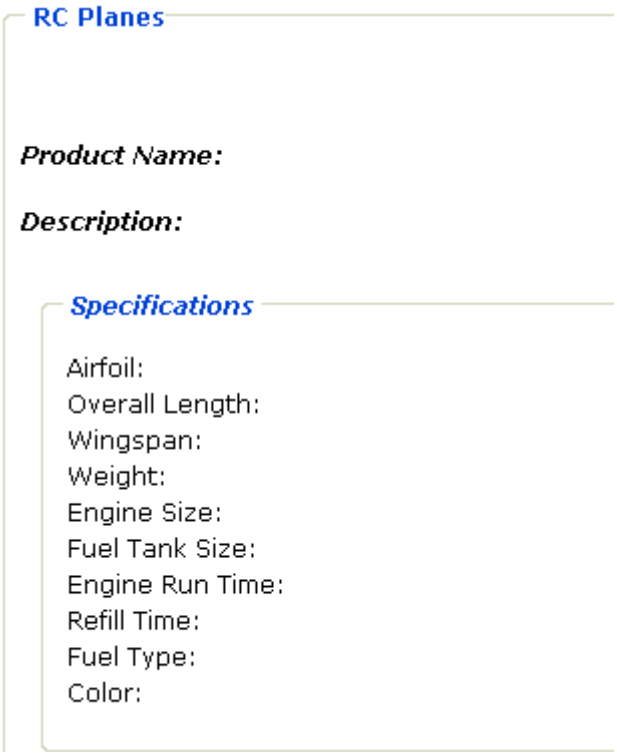
NOTE This section only appears if you do not use the Data Designer to create your Smart Form.

You can validate the content created and edited with Ektron CMS400.NET with a schema if desired. The validation information contains information about the schema.

Field	Description
XML Schema	Specify the .xsd file used to validate the XML content that the Smart Form will be assigned to.
Target Namespace	Specify the default namespace used for outgoing XML.

Preview Tab

The **Preview** tab displays the XSLT applied to the editor when XML content is created. This is the XSLT that was created for the Smart Form.



Display Information Tab

The display information tab lists the XSLTs that are used when displaying XML in the respective environment.

Field	Description
XSLT1	Display XSLT 1
XSLT2	Display XSLT 2
XSLT3	Display XSLT 3
XSLT Package	Display XSLT Package (created using the Data Designer)

NOTE When a Smart Form is created using the Data Designer, a default display XSLT is also created which looks similar to the edit XSLT created in the editor. This default XSLT can be applied to the XML content.

The asterisk (*) denotes the default XSLT for the Smart Form.

The tab also displays the Smart Form's xpaths.

Editing Smart Forms

After creating a Smart Form, you can modify it when files defined in the configuration have changed.

Since there are two ways to create a Smart Form, there are two ways to edit one.

- "Editing Data Design Packages" on page 196
- "Editing a Smart Form Created with External Files" on page 198

Editing Data Design Packages

After you create a Smart Form, you can modify it.

Before You Edit the Data Package!

Before editing a Smart Form data package, it is important to understand the effects of the modifications. If an XML data package is edited, all content to which the configuration is applied is updated. Information that was originally created may be lost, depending on the changes you make to the package.

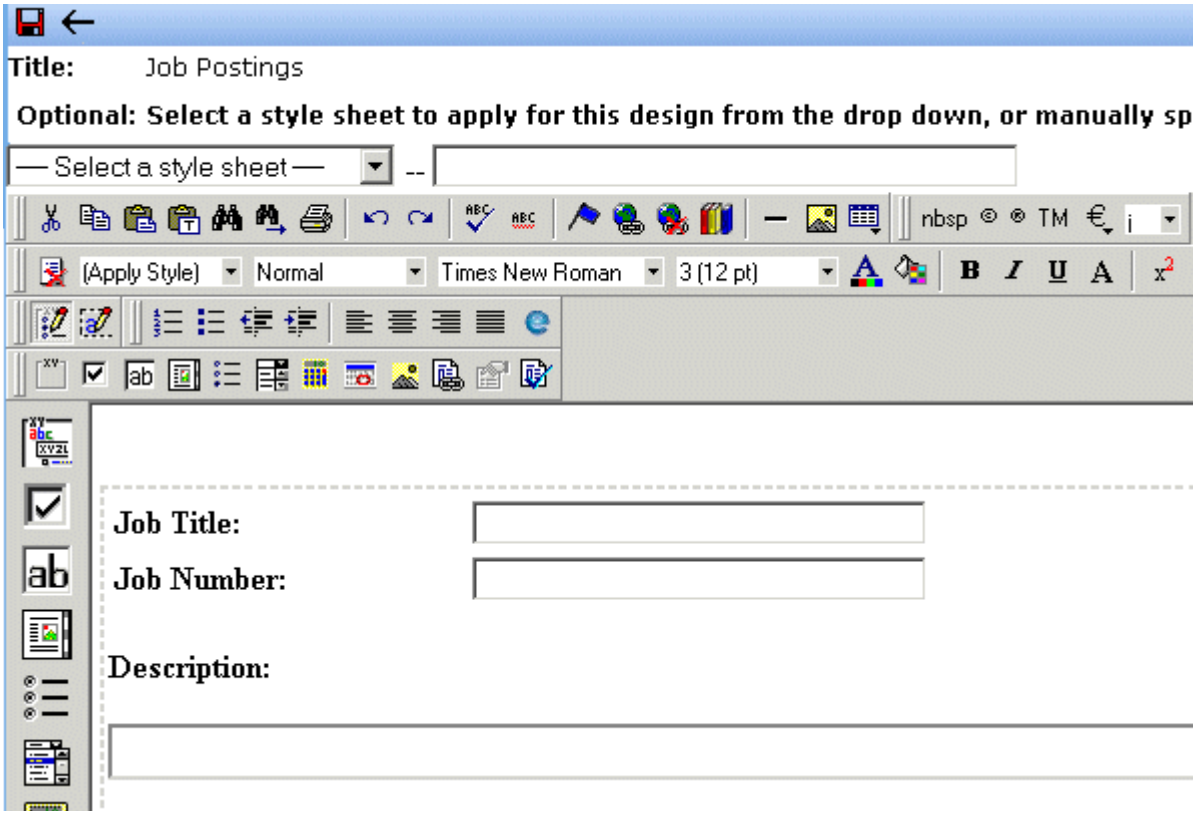
To ensure that information is not lost, use the Create New Smart Form Based on Existing Smart Form option on the view Smart Form screen. See "Creating Smart Forms Based on Existing Configurations" on page 199 for more information.

Editing a Data Design Package

To edit a data design package, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Smart Form configuration you want to edit.
3. The View Smart Form screen appears with a more detailed description of the configuration.
4. Click the Data Design Mode button ( ) at the top of the screen.

5. The Edit Data Design Package screen displays the current package.



6. Make the necessary changes to the Data Design package in the editor. See "Using the Data Designer with eWebEditPro +XML" on page 209 for information about creating XSLTs using the Data Designer.

7. Click the Update button ( ).

Editing a Smart Form Created with External Files

WARNING! Release 7.5.2 and up of Ektron CMS400.NET supports two editors: eWebEditPro+XML and eWebEdit400. If you want users to insert Smart From information using eWebEdit400, you cannot create or edit Smart Forms using external files. You must create and edit them using Ektron CMS400.NET's Data Designer.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.

2. Click the Smart Form configuration you want to edit.
3. The View Smart Form screen is displayed.
4. Click the Edit button ( ).
5. The Edit Smart Form screen is displayed.
6. Edit the necessary fields to update the Smart Form. See "Smart Form Fields" on page 189.
7. Click the Update button ( ).

Now, all content and folders that use the Smart Form take their properties from the updated configuration.

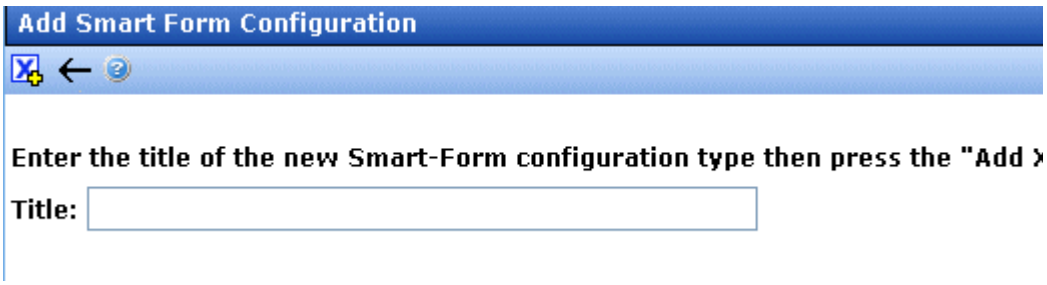
See Also: "XML File Verification" on page 190

Creating Smart Forms Based on Existing Configurations

Whenever major changes must be made to a Smart Form, Ektron recommends making a copy of it and modifying the copy. In this way, you do not affect the content controlled by the original configuration.

To create a new Smart Form based on an existing one, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Smart Form configuration you want to view.
3. The View Smart Form screen appears with a more detailed description of the configuration.
4. Click the Create New Smart Form button ( ).
5. The Add Smart Form screen is displayed.



6. Enter a **Title** for the new Smart Form.
7. Click the Add Smart Form button ( ).
8. The View Smart Form screen for the new Smart Form is displayed. From here, you can perform the necessary actions on it.

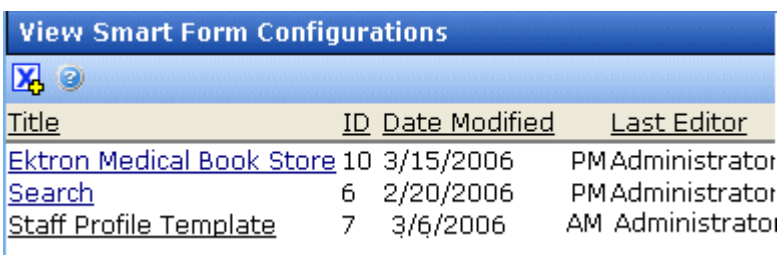
Viewing Data Designer XSLTs

When a Smart Form is created using the Data Designer, an XSLT is produced to assist you with creating your display XSLT. This XSLT includes the structure for your XML documents.

If a display XSLT is not applied to a Smart Form, content is displayed using the default XSLT displayed in the View XSLT screen.

To view the XSLT for a Smart Form, follow these steps.

1. In the folder tree on the left side of the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Smart Form configuration whose XSLT you want to view.



NOTE The XSLT only appears if the Smart Form was created using the Data Designer.

3. The View Smart Form screen appears with a more detailed description of the configuration.
4. Click the View XSLT button ( ).
5. The View XSLT screen is displayed.

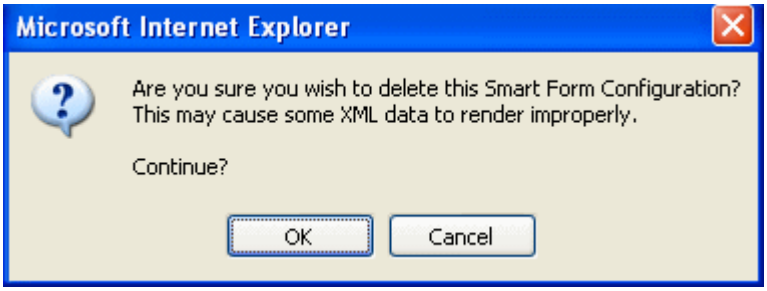
You can use this information to create your display XSLT.

Deleting Smart Form Configurations

You can delete Smart Form configurations that are no longer needed. To do so, follow these steps.

NOTE If any Smart Form that uses this configuration has one or more indexed fields, you must delete all content that uses the configuration before you can delete it. *See Also:* "Specifying Which XML Elements are Indexed" on page 205

1. In the Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Click the Smart Form configuration you want to delete.
3. The View Smart Form screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.


Microsoft Internet Explorer
Are you sure you wish to delete this Smart Form Configuration?
This may cause some XML data to render improperly.
Continue?
OK
Cancel

6. Click **OK**.

XML Indexing

XML Indexing lets site visitors search XML information collected via Smart Forms and view the results. The results appear as a list of topic titles, optionally followed by the content summary.

The Data Designer lets you choose which XML fields to index. You can also validate those fields to be numbers, dates, Boolean, or string values. After you identify fields to be indexed, a search dialog is created. Where appropriate, the dialog automatically populates drop down lists from the indexed data.

NOTE As the name implies, XML indexing is only available for information collected on XML Smart Forms. It cannot find information in XHTML content.

See Also:

- ”User vs. Developer Selected Search Criteria” on page 203
- ”Types of Search Criteria” on page 204
- ”Setting up a User-Defined Search” on page 205
- ”Setting up a Developer-Defined Search” on page 205
- ”Specifying Which XML Elements are Indexed” on page 205
- ”Search Dialog Setup” on page 207
- If you are upgrading from an earlier version of **Ektron CMS400.NET** to 7.5, the Knowledge Base article “INFO: 7.5 Upgrade: Changes to 7.5 XML Index Search” lists upgrade considerations.

User vs. Developer Selected Search Criteria

There are two ways that XML Indexing can make XML content available to your site visitors.

- *Present a screen of search criteria.* A site visitor uses the screen to select the kind of information he is looking for. For example, your site sells outdoor clothing, and a user searches for wool hats under $20.00.

- *Determine the search and display criteria programmatically using a custom function*. Your Web developer inserts a control that specifies search and display criteria. For example, your site sells books. A site visitor sees a navigation link **Find books under $5.00**. When he clicks that link, the control searches your XML content and returns all books whose price is less than $5.00.

NOTE The Ektron Windows Service manages the background processing that creates XML indexes. *See Also:* "Ektron Windows Service" on page 1059.

NOTE Ektron CMS400.NET content has a **Content Searchable** check box, which is checked by default. It must be checked if you want the Index Search to find Smart Form content. *See Also:* "The Content Searchable Field" on page 412

Types of Search Criteria

XML Indexing allows multi-dimensional searches on all types of XML data.

Data Type	XML Index Search can
Plain text	Use an exact phrase, or any word or letter in a phrase
Numerical and date information	Use expressions such as greater than, less than, or between two values
List and choice fields	Display the field values and let the user select relevant ones. Note: Choices field values can consist of single letter.
Image Only	Use the `alt` or `src` attribute value
Link	Use the text or `href` attribute value

For every search field, **NoSelection** is a value. If this is chosen, the search disregards that field when compiling results. However, the user must select a value (or range of values) in at least one field to get results.

WARNING! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

WARNING! In order for Smart Form fields to searchable, they must be stored as elements *not* attributes. *See Also:* "Advanced Button" on page 280 If you are upgrading to version 7.5, inspect your Smart Forms and change field properties as needed so they are stored as elements not attributes.

Setting up a User-Defined Search

To create a user-defined search, follow these steps.

Step	For more information, see
1. Select a Smart Form	"Accessing Smart Forms" on page 184
2. Assign indexing to each field to be searched	"Specifying Which XML Elements are Indexed" on page 205
3. Set up the search screen	"Search Dialog Setup" on page 207
4. Have your Web developer set up a page that displays a search control and a results control	**Ektron CMS400.NET** Developer's Manual section "Introduction to **Ektron CMS400.NET** Server Controls" > "IndexSearch Server Control"

Setting up a Developer-Defined Search

To set up a developer-defined search, which defines both the criteria and the results page, use the `SearchParmXML` property of IndexSearch Server Control. For more Information, see the **Ektron CMS400.NET** Developer's manual section "Ektron CMS400.NET Server Controls" > "List of Server Controls" > "IndexSearch Server Control."

Specifying Which XML Elements are Indexed

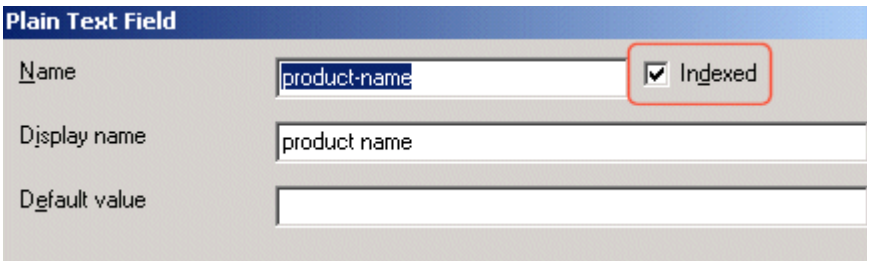
You can index the following types of fields:

- Checkbox
- Plain Text
- Choices
- List
- Calculated
- Image Only
- Link
- Calendar

WARNING! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

To enable indexing for any field on an XML Smart Form configuration, follow these steps.

1. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Smart Form Configuration**.
2. Select a Smart Form configuration that you want to index. *See Also:* "Accessing Smart Forms" on page 184
3. Open its Data Design. *See Also:* "Using the Data Designer with eWebEditPro +XML" on page 209
4. Move the cursor to the first field you want to index.
5. Right mouse click the field.
6. Choose **Field Properties**.
7. A dialog box appears.



8. Check **Indexed**.
9. Repeat these steps for every field by which you want site visitors to search the Smart Form.

Validation

Validation ensures that the user completing an XML form enters the right type of data. You can decide if the user's input should be a number, boolean, date, string, zip code, etc. If you do not specify type attributes using validation data, the field is a string. *See Also:* "Validation" on page 245

Validation is especially important when users search XML data, because it helps the search find the correct information. For example, if a field collects a zip code but you set its type to plain text, a user completing the form can insert anything into the field. If the user inserts the letter "o" instead of the number zero (0), the field accepts that input but the search will not find that record. On the other hand, if you set validation to zip code, the user can only insert five or nine digits -- any other entry is rejected.

Search Dialog Setup

When you save a Data Design form, a dialog appears that lets you view all and modify indexed fields (illustrated below).

The information on this screen is explained below.

Screen section	Description
Xpath	The xpath to each indexed field.
Label	The index field's field name, as defined on its dialog.
Multiple	Check this box if you want to allow the user performing the search to select more than one value. This checkbox only appears with List and Choice fields. Note: To select more than one value on the search screen, the user holds down the <Ctrl> key while selecting additional options.

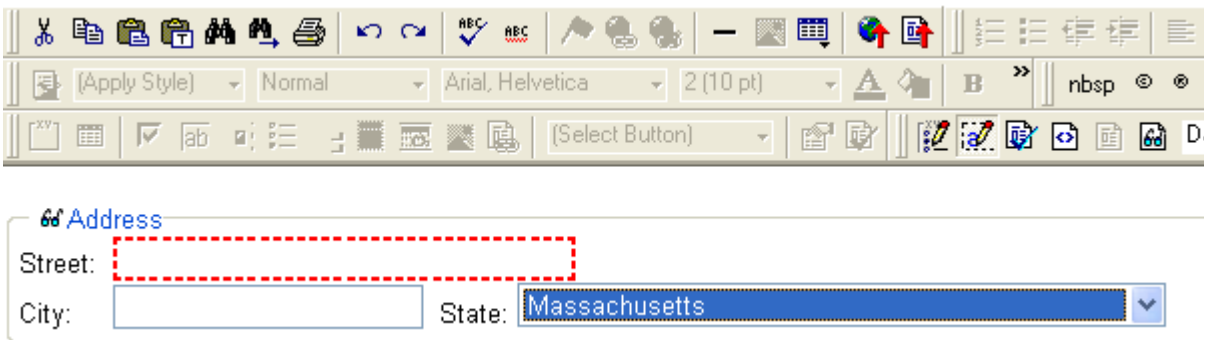
Using the Data Designer with eWebEditPro +XML

Introduction

eWebEditPro+XML's Data Designer feature lets you design a screen that collects information from users and stores it as XML data. Creating the screen is simple and requires no knowledge of XML.

NOTE When using the Data Designer feature, the following browsers are supported: Netscape 6.2 or later; Internet Explorer 5.5 or later.

For example, you may create the following screen.



This screen can store information entered by a user as the following XML.

```
 <address>
<street>123 Sesame St.</street>
<city>New York</city>
<state>NY</state>
 </address>
```

Note that the street and city fields accept text, while the state field accepts a pre-defined value (a state).

This section explains how to use the Data Designer feature through the following topics.

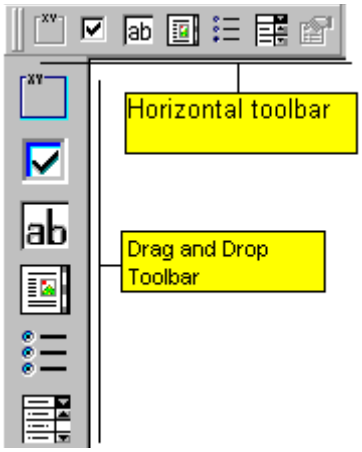
- ”Differences in eWebEditPro+XML” on page 210
- ”Design Mode vs. Data Entry Mode” on page 211
- ”Designing a Screen” on page 212
- ”Inserting a Field Type” on page 214
- ”Sample Screen Design” on page 218
- ”Data Designer Field Types” on page 227

Differences in eWebEditPro+XML

When you use the Data Designer, **eWebEditPro+XML** changes in the following ways.

NOTE The design toolbar and the design mode and Data Entry mode buttons appear only if your site administrator has defined them in the configuration data.

- two toolbars appear, illustrated below. The toolbar buttons let you design the data entry screen. Each button represents a different kind of field.

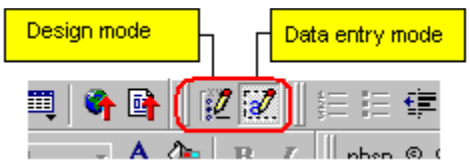


Both toolbars provide mostly the same buttons. The major difference between them is how you use the button to add a field to the screen. If you are using the *horizontal* toolbar, place the cursor where you want field, and click the toolbar button.

When using the *drag and drop toolbar*, drag a button to desired screen location.

Note that a context-sensitive menu, available by right clicking the mouse, is also available to perform the commands. You can right click the mouse then select **Insert Field** to display a context-sensitive menu of all commands. To edit the properties of any field already on the screen, select the field, right click the mouse, and select **Field Properties**.

- two buttons appear on the regular (Edit) toolbar: Design mode and Data Entry mode. (For more information, see "Design Mode vs. Data Entry Mode" on page 211.)



The Data Entry mode button lets you preview the screen being created.

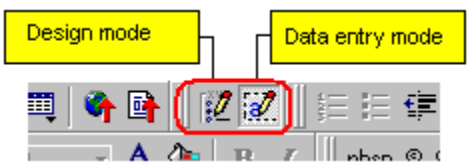
- several toolbar buttons are grayed out -- they do not work with Data Designer

Design Mode vs. Data Entry Mode

The Data Designer feature supplies two "modes," which make it easier for you to design screens:

- *Data Design mode* - lets you insert and remove fields from the data entry screen
- *Data Entry mode* - simulates the screen's appearance during data entry

Two toolbar buttons let you switch between modes. The buttons are located on the Edit toolbar.



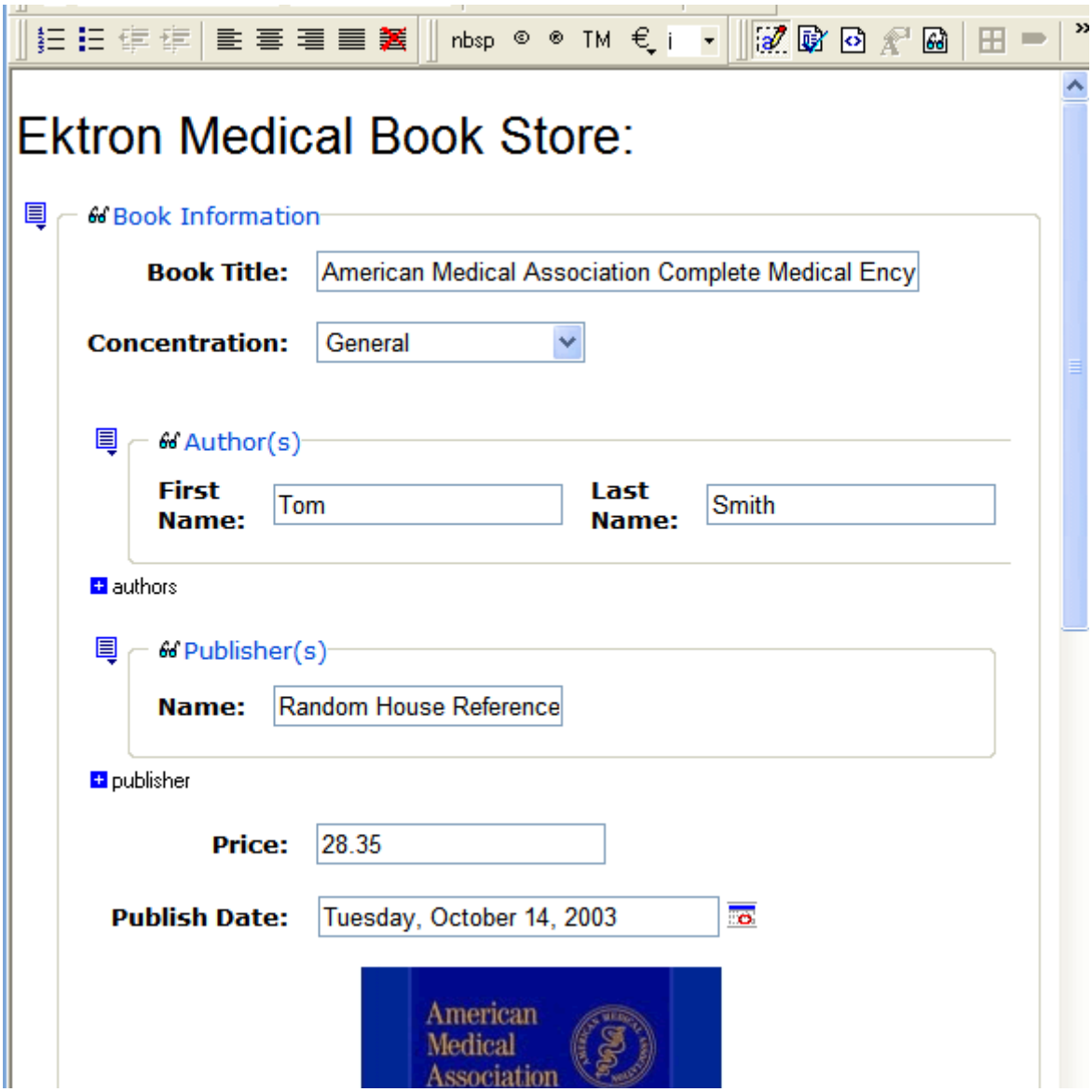
When you begin to create a data entry screen, you are in design mode. To view the screen as the user will see it, click the Data Entry button (). To switch back to Data Entry mode and modify the screen, click the Data Designer button ().

Designing a Screen

To design a screen that captures XML data, you

1. Ask your system administrator to enable a version of **eWebEditPro+XML** that includes the Data Designer. (The administrator should refer to the Data Designer chapter of the Developer's Reference Guide.)
2. For each field on the screen, select a field type, and place it on the screen. "Inserting a Field Type" on page 214 explains the kind of field that each button represents.

   You can also use **eWebEditPro+XML**'s rich formatting capabilities to design the screen. For example, you can format text, and use tables, images and hyperlinks to guide the user through the data entry process. Below is a sample screen created with the Data Designer.



If you are familiar with XML and want to manually edit the page, use the View Source button ( ) to edit the page's source code. If the edited source XML is not well-formed, you are notified and must remain in source view until you fix it.

Inserting a Field Type

eWebEditPro+XML provides several options that let you insert or edit fields in the editor. Each field type is described below.

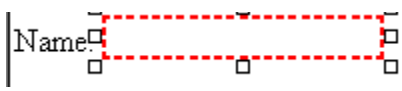
Field type	Icon	Description	For more information, see
Group Box		Groups related fields, which can be surrounded by a box and have a caption	”Group Box” on page 228
Tabular		Same as group box, but fields can be presented in a table format	”Tabular Data” on page 232
Checkbox		User’s response is either checked or unchecked	”Checkbox” on page 240
Plain Text		Free text field; user cannot format text	”Plain Text” on page 242
Rich Area		Free text field; user can format text using the editor	”Rich Area” on page 246
Choices		Several choices appear on screen. User checks appropriate boxes. All user choices are inserted as values within single XML tag.	”Choices” on page 248
List		Same as Choices except options appear in a drop-down box	”Select List” on page 252
Calculated		Performs calculations using other fields on the screen	”Calculated Field” on page 258
Calendar		Lets user insert a date by clicking a calendar	”Calendar Field” on page 267
Image Only		Lets user insert an image	”Image Only Field” on page 274
File Link		Lets user insert a link to a file, such as a PDF document	”File Link Field” on page 276

Field type	Icon	Description	For more information, see
Field Properties		Lets you change the properties of any field. Select the field then click this button. Note: This option is also available on the right click menu, but not available on the drag and drop toolbar	
Validate		Ensure the screen contains valid XML. This button is available in both data entry and data design modes.	

Deleting a Field from the Screen

To remove a field from the screen, follow these steps.

1. Move the cursor to the field.
2. When the cursor changes to a four-headed arrow, click the mouse.
3. Small boxes surround the field.



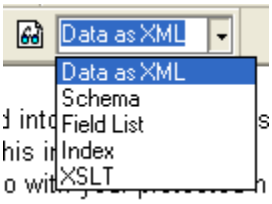
4. Click the cut icon ( ) to remove the field.

Usually, the field label is not deleted when you delete a field. To delete the label, use standard **eWebEditPro+XML** editing buttons.

Previewing the Screen

If you want to view how the screen will appear to the person who will complete the screen, click the View Data Entry button ( ). (*See Also:* ”Design Mode vs. Data Entry Mode” on page 211.)

If you want to see an internal representation of the Data Design, click the Preview button ( ). Next to the Preview button is a drop-down list of internal formats in which you can view the data design.



The formats are described below.

Format	Description	Example
Data as XML	The XML data document	<?xml version="1.0" ?> - <root> - <Information> <LastName /> <FirstName /> <MiddleName /> <Gender>male</Gender> <Address /> <city /> <state>MA</state> <Zip /> <SSN /> <BDate /> <HomeTel /> <WorkTel /> <x-ray /> - <Dental_Insurance> <Field1 /> <OtherInsurance>N/A</OtherInsurance> <Account_Number>N/A</Account_Number> </Dental_Insurance> <medication /> <lastAppointment /> <clincal /> </Information> </root>

Format	Description	Example

Schema	Defines the structure, content, and semantics of an XML document	`<?xml version="1.0" ?>`
		`- <xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified" xmlns:xs="http://www.w3.org/2001/XMLSchema">`
		`- <xs:element name="root">`
		`- <xs:complexType>`
		`- <xs:sequence>`
		`- <xs:element name="Information">`
		`- <xs:complexType>`
		`- <xs:sequence>`
		`- <xs:element name="LastName">`
		`- <xs:simpleType>`
		`- <xs:restriction base="xs:string">`
		`<xs:minLength xmlns:xs="http://www.w3.org/2001/XMLSchema" value="1" />`
		`</xs:restriction>`
		`</xs:simpleType>`
		`</xs:element>`
		`- <xs:element name="FirstName">`
		`- <xs:simpleType>`
		`- <xs:restriction base="xs:string">. .. ..`

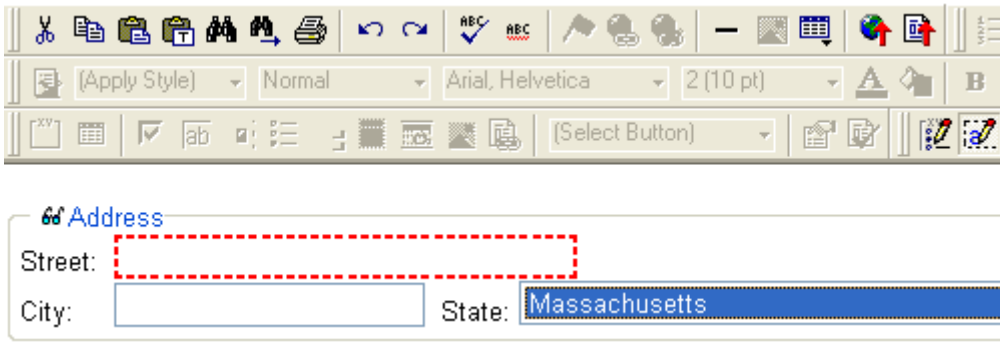
Field List	A list of all fields and information about them (as XML)	`<fieldlist>`
		`<field name="LastName" datatype="string" basetype="text" xpath="/root/Information/LastName" title="Last Name">Last Name</field>`
		`<field name="FirstName" datatype="string" basetype="text" xpath="/root/Information/FirstName" title="First Name">First Name</field>`
		`<field name="MiddleName" datatype="string" basetype="text" xpath="/root/Information/MiddleName" title="Middle Name">Middle Name</field>`
		`<field name="Gender" datatype="choice" basetype="text" xpath="/root/Information/Gender" title="" datalist="IDAPK3KC">Gender</field>. .. .. ..

Index	xpath information for any indexed field on the screen	`<?xml version="1.0" ?>`
		`- <indexable>`
		`<xpath type="string">/root/Information/SSN</xpath>`
		`<xpath type="string">/root/Information/HomeTel</xpath>`
		`<xpath>/root/Information/WorkTel</xpath>`
		`</indexable>`

Format	Description	Example
XSLT	The Data Design document's presentation XSLT	<?xml version="1.0" ?> - <xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform"> <xsl:output method="xml" version="1.0" omit-xml-declaration="yes" indent="yes" encoding="utf-8" /> <xsl:strip-space elements="*" /> <xsl:variable name="ektdesignns_fieldlist" select="/*/ektdesignpackage_list/fieldlist" /> - <xsl:template match="/" xml:space="preserve"> - <fieldset id="Information" title="Demographic Information"> <legend>Patient Information</legend> - - Last Name <xsl:text> </xsl:text> <xsl:value-of select="/root/Information/LastName" /> First Name <xsl:text> </xsl:text> <xsl:value-of select="/root/Information/FirstName" /> .. ..

Sample Screen Design

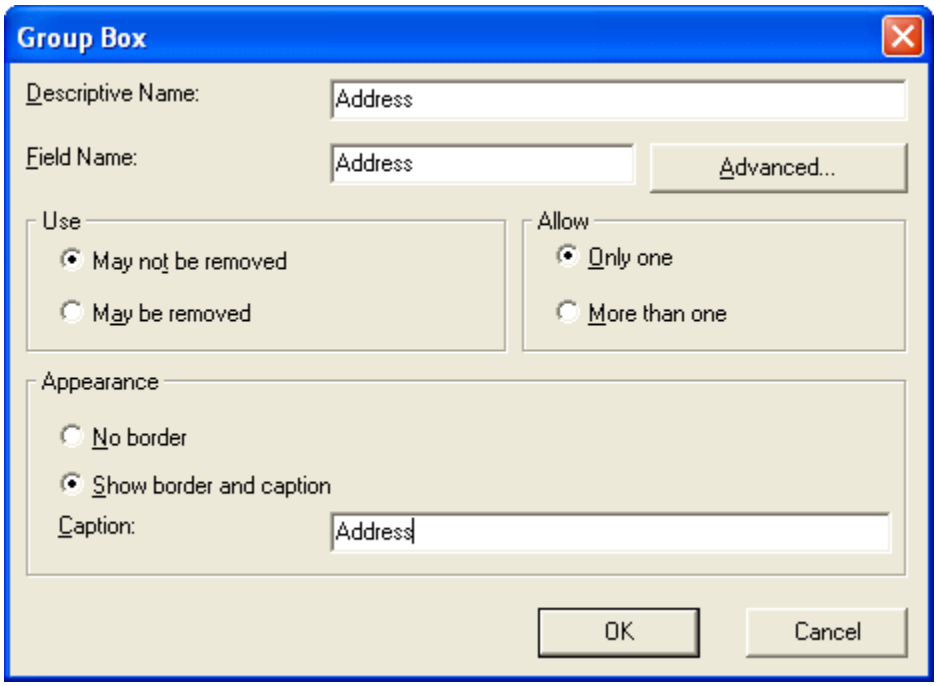
This section provides a brief overview of designing a screen, so that you can learn how the pieces fit together. Let's assume you want the screen to look like this.



NOTE The following example helps you understand how to create a simple data entry screen. It does not explain how to save a screen so that a user can enter data into it. When you are ready to create an screen, ask your system administrator to help determine a method for saving it and making it available to users for data entry.

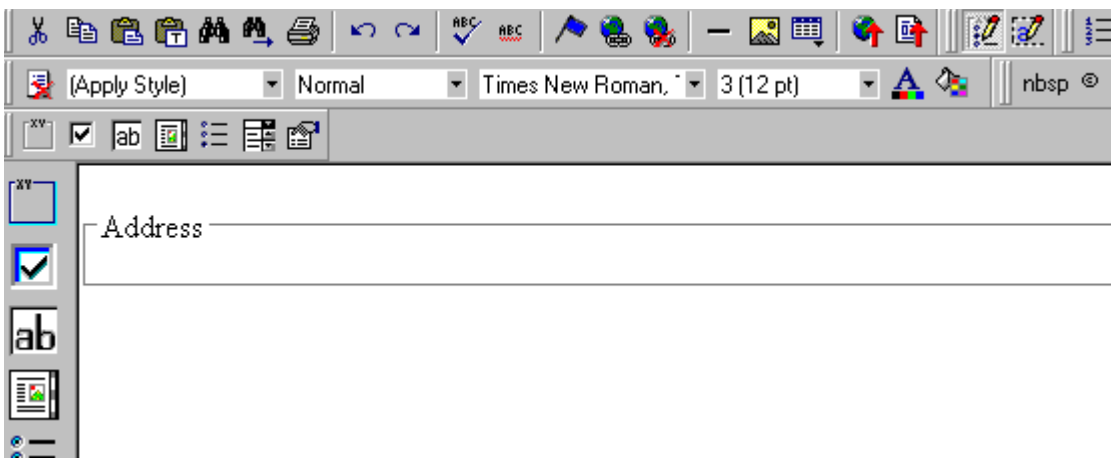
To create such a screen, follow these steps.

1. Sign on to **eWebEditPro+XML** in Data Designer mode. (Ask your system administrator how to do this. The Developer's Reference Guide (version 4.0 and higher) provides details.)
2. Since you want to surround the data entry fields with a box and a caption, drag the Group Box button ( ) from the drag and drop toolbar onto the screen. Then, complete the dialog as shown below.

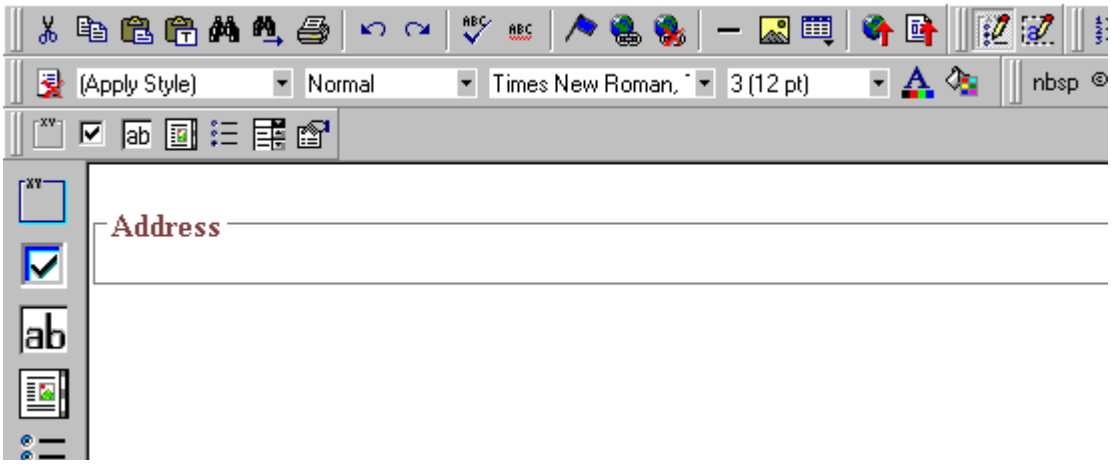


NOTE Later, each field on the dialog is documented. Since this section provides an overview, it does not delve into those details.

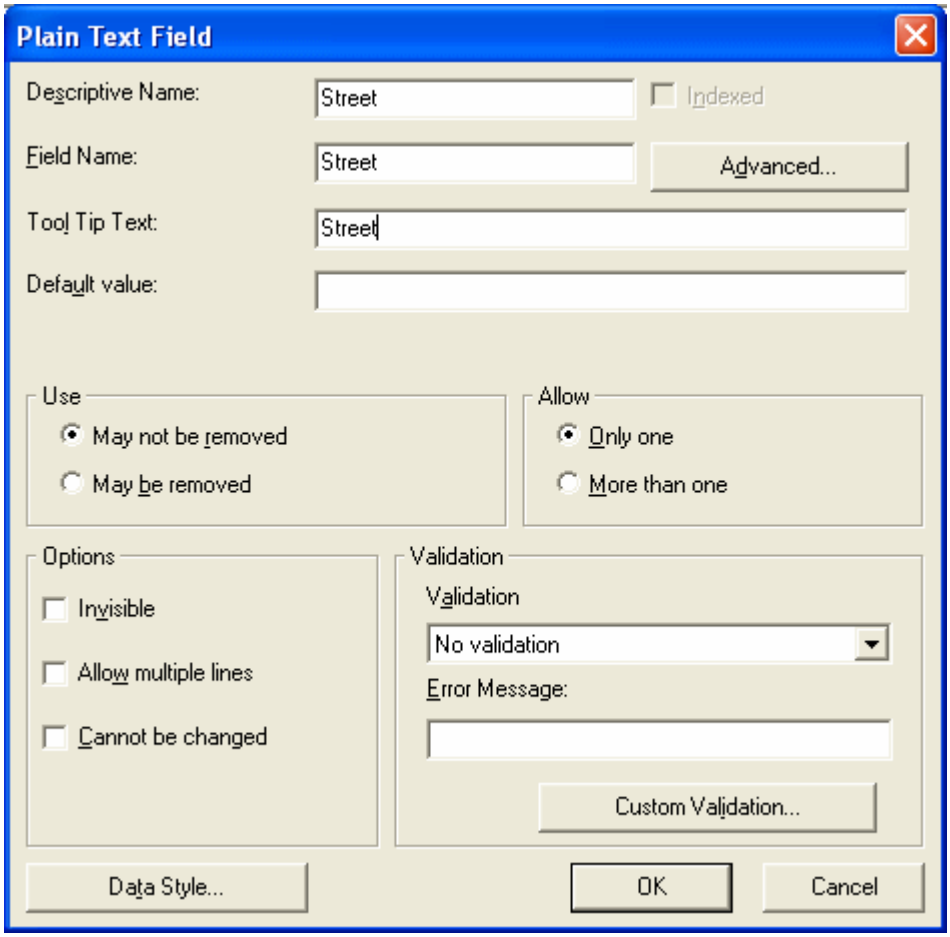
At this point, the screen looks like this.



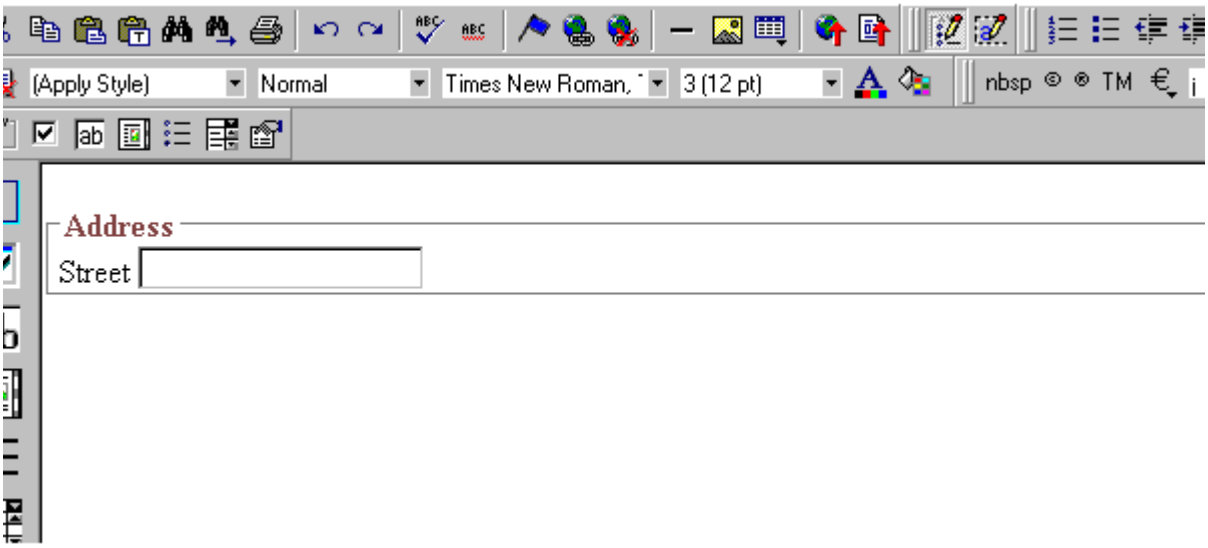
3. Select **Address** then apply bold and the custom color shown above. Now the screen looks like this.



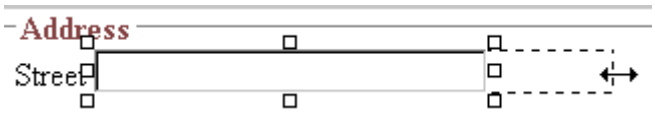
4. The next field, street, should let the user enter text. So, drag the plain text field icon ( ) into the space below **Address**. Then, complete the dialog as shown below.



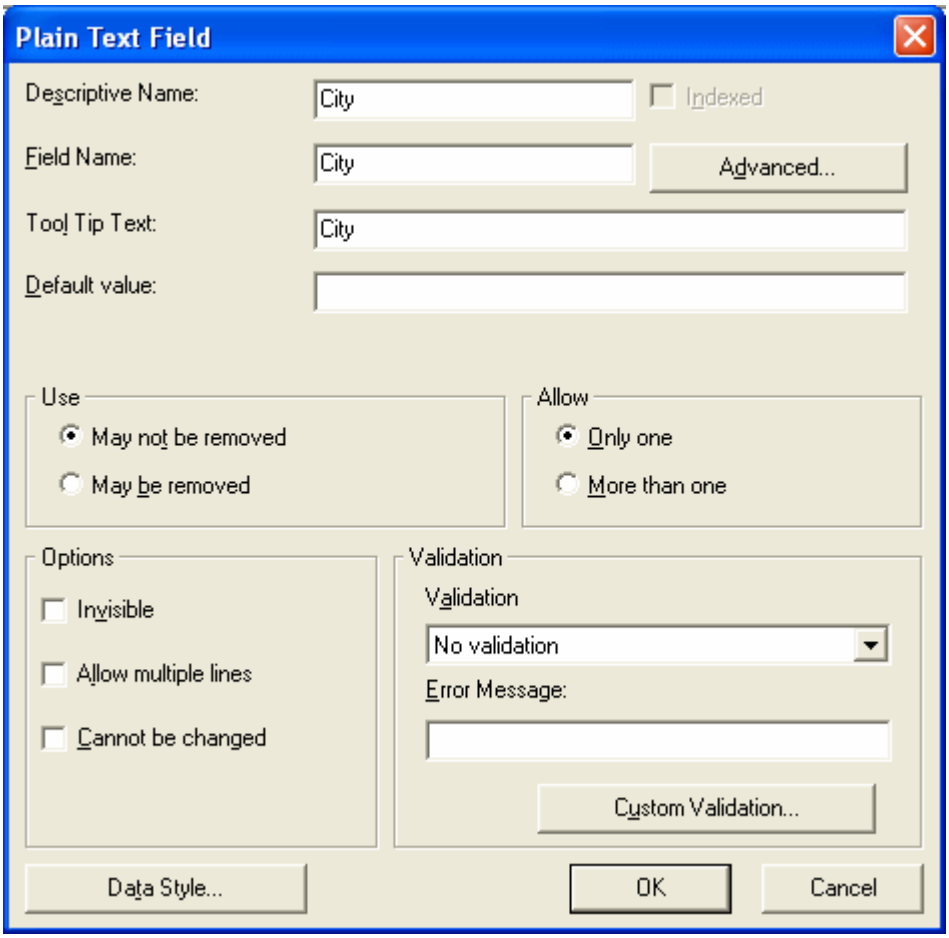
Now, the screen looks like this.



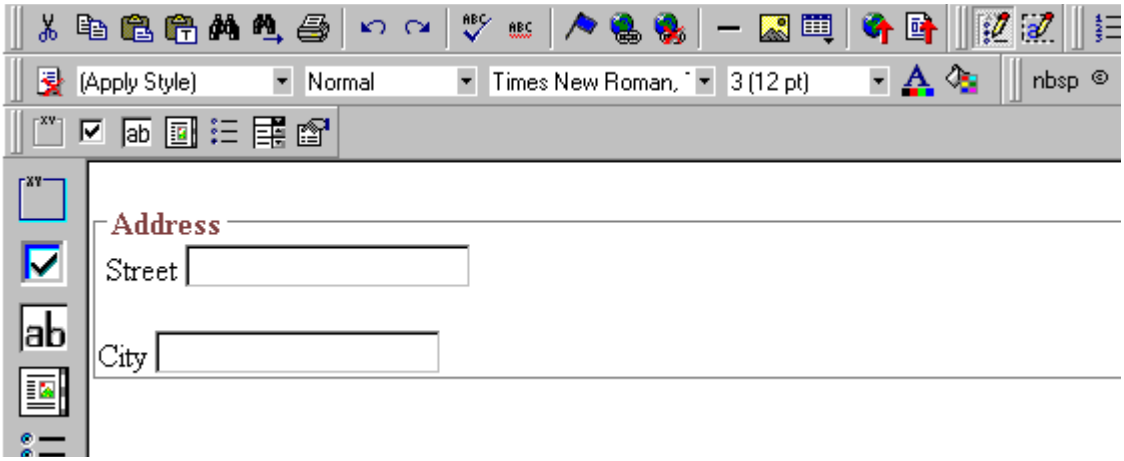
Note that the **Street** field is not wide enough. To widen it, click the field, move the cursor until you see a two-sided arrow, and drag the arrow to the right.



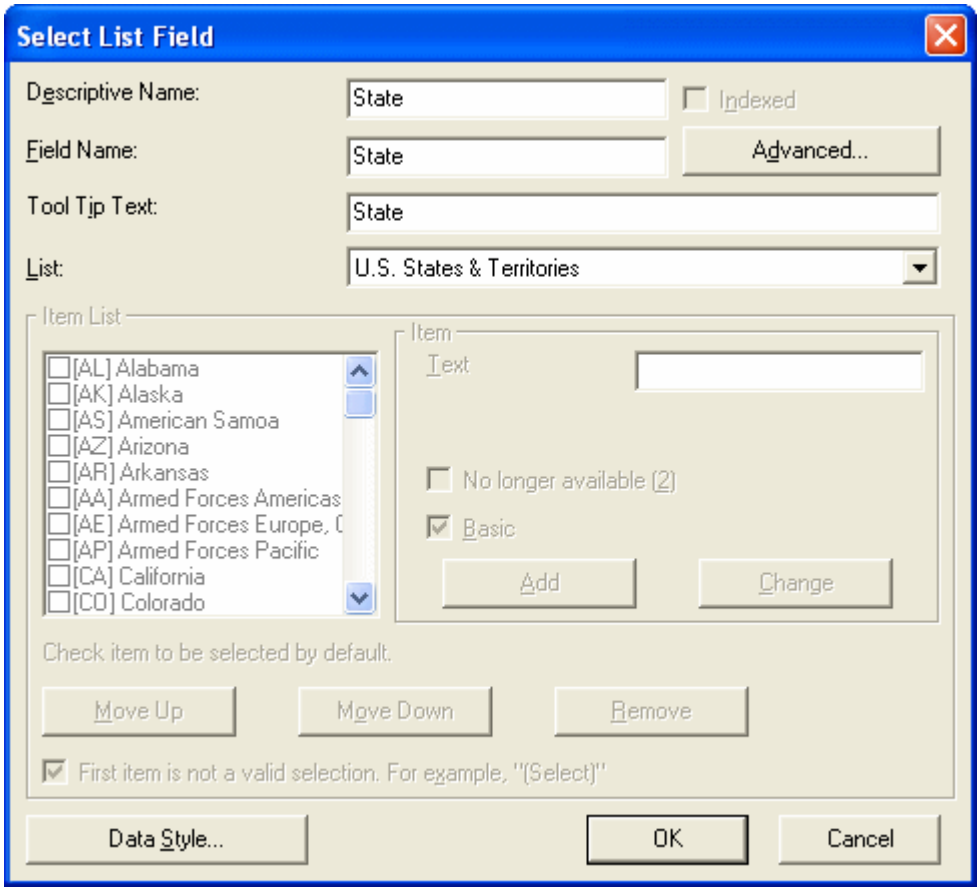
5. The next field, **City**, should also let the user enter text. Assume that you want **City** to appear in the line below **Street**. To make room for **City**, move the cursor to the end of the **Street** field and press <Enter> to create a new line. Next, drag the plain text field icon ( ) into the line below **Street**. Then, complete the dialog as shown below.



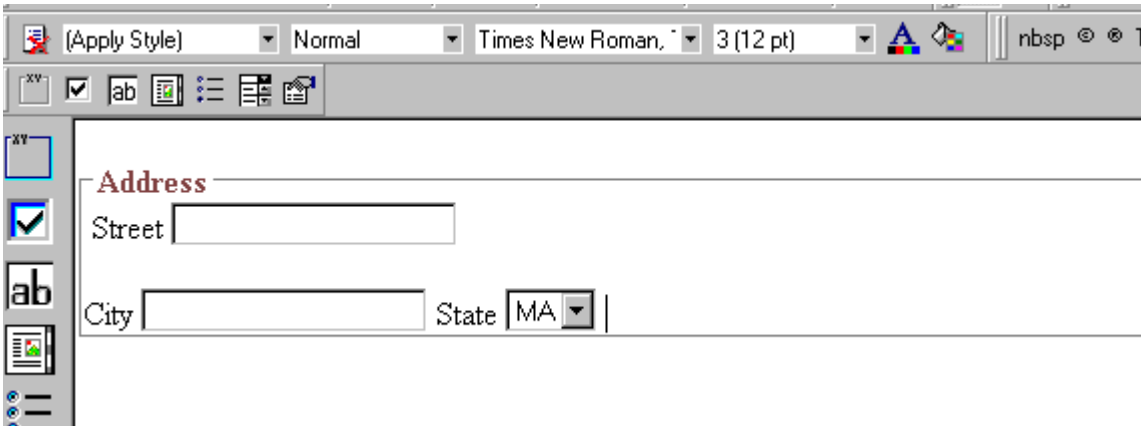
Now, the screen looks like this.



6. The next field, **State**, should let the user choose from several states. Assume that you want the state to appear to the right of **City**. Move the cursor to the end of the **City** field and drag the Select List Field field icon ( ) into that space. Then, complete the dialog as shown below.



Now, the screen looks like this.



The above example is very simple and does not use the Data Designer's more powerful and flexible features. To learn more about Data Designer, read the rest of this chapter.

Data Designer Field Types

To help you use all of the Data Designer's capabilities, this section explains each field type you can insert. They are very flexible and can accommodate all of your needs when designing a data entry screen.

The Data Designer supports the following field types.

- "Group Box" on page 228
- "Tabular Data" on page 232
- "Checkbox" on page 240
- "Plain Text" on page 242
- "Rich Area" on page 246
- "Choices" on page 248
- "Select List" on page 252
- "Calculated Field" on page 258
- "Calendar Field" on page 267
- "Image Only Field" on page 274
- "File Link Field" on page 276

Group Box

A Group Box field lets you group related fields together on a screen by surrounding them with a box and optionally placing a caption above them.

After you insert a Group Box field, to insert other kinds of fields within the box,

- drag the fields into the box (if you are using the drag and drop toolbar)

or

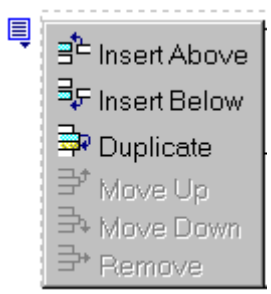
- place the cursor inside the box then select a field type button (if you are using the horizontal toolbar)

NOTE The tabular data field type might better accommodate your needs. See "Tabular Data" on page 232.

Advantages of Grouping Fields

One advantage of grouping fields is that you can allow the user in Data Entry mode to add another instance of a group.

For example, if a screen collects several fields of information about each telephone call, the user could simply click the **Insert Below** button to insert a new group of fields, ready to collect information about the next call.

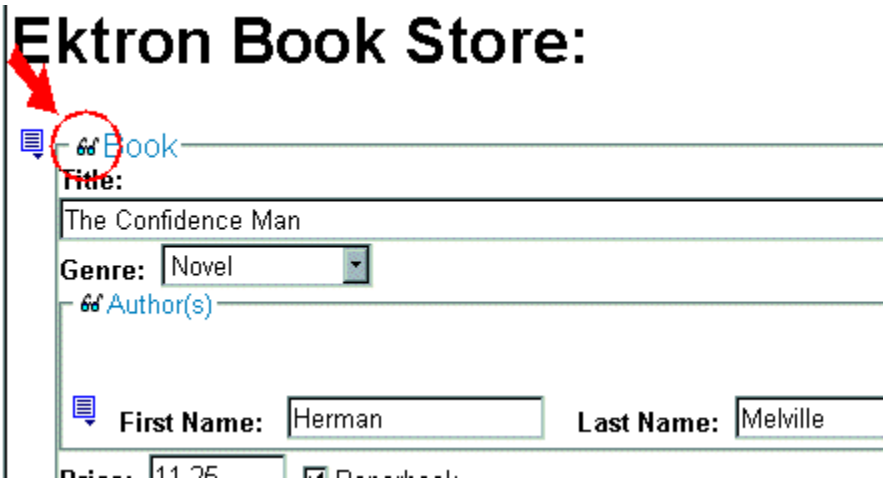


Another advantage of grouping fields is that you can suppress a group of irrelevant fields. For example, if a screen includes two groups of fields that collect information about hardcover and

paperback books, and you are adding information about a hardcover book, you can collapse the paperback book questions because they are not relevant to your current task.

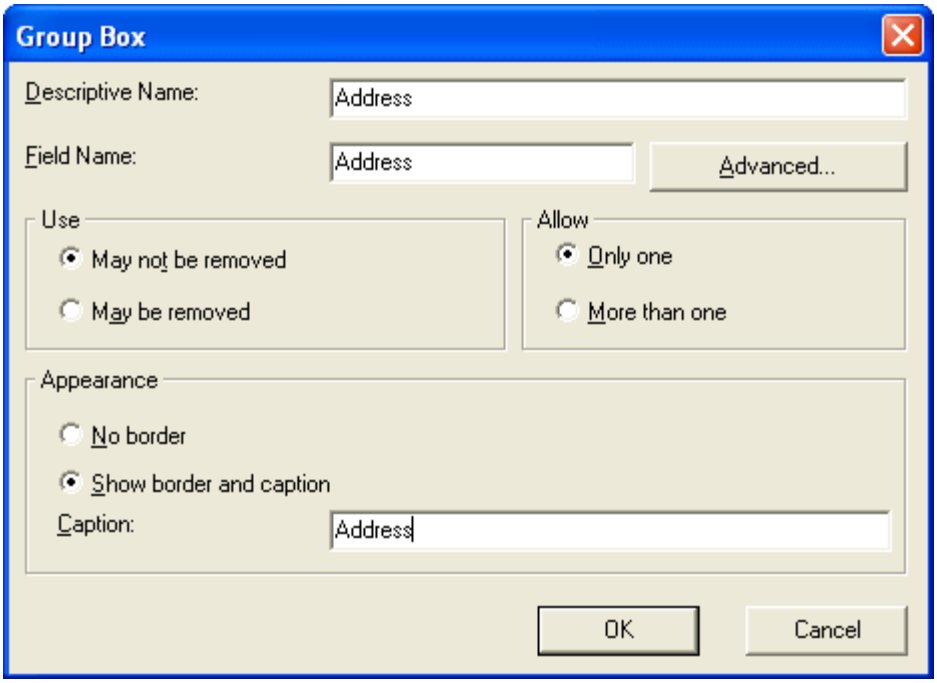
Use the eyeglass icon to expand or collapse the display of fields within a group.

Expanded Group Field with glasses icon highlighted



Collapsed Group Field

Dialog Box



Fields on the Group Box Dialog

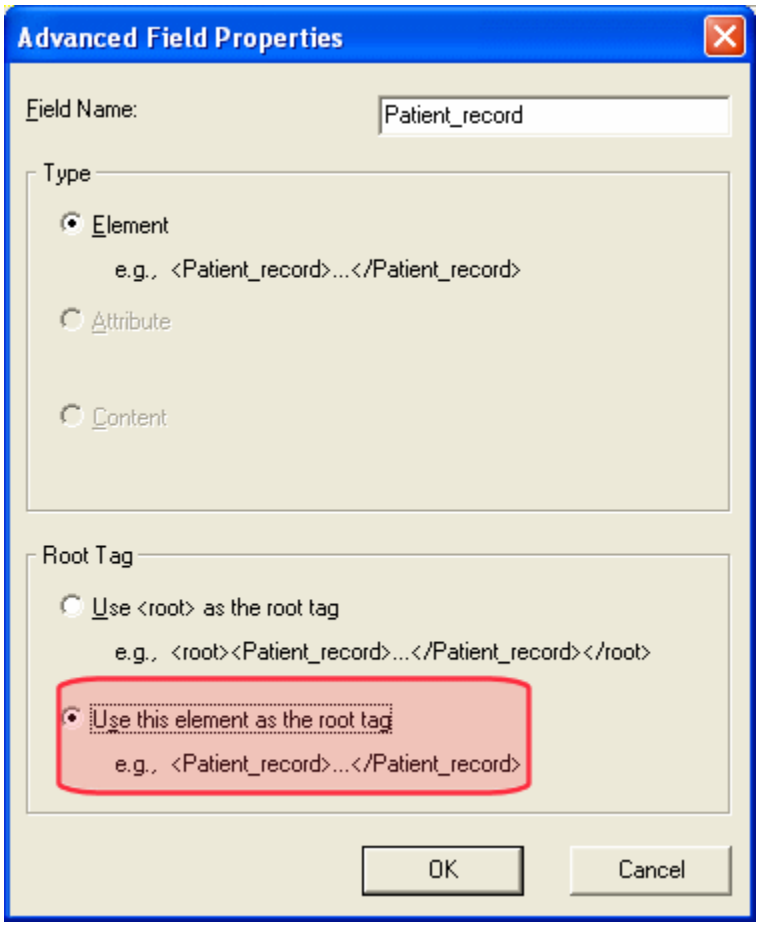
Field	Description
Descriptive Name	Enter the name of this field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. Internally, the name is used as the field's caption. The Name Field's Default Value By default, the Data Designer assigns a name made up of **Field** followed by the next available number. So, the first field's default name is **Field1**, the second field's default name is **Field2**, etc. You can change the default if you want.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280

Field	Description
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284
Appearance	Click **Show border and caption** if you want to surround the fields in this group with a box. You can also create a caption to appear in the top line of the box. Click **No border** if you do not want to surround the fields in this group with a box.
Caption	If desired, enter text to describe this group of fields on the data entry screen. For example: After you insert this field onto the screen, you can use **eWebEditPro+XML**'s formatting capabilities to modify its size, font, color, and other attributes. Note: The Caption field only appears on this dialog when you create the Group Box field. If you later try to edit the field, the Caption field is not on the dialog. However, you can edit Caption text within the editor.

Using a Tag Other Than <Root>

By default, **Ektron CMS400.NET** surrounds your Data Design with `<root>` tags. If you would like to replace the <Root> tags with another element name, follow these steps.

1. After creating a new Data Design screen, insert a Group Box as the first field.
2. In the Group Box Dialog**'s Field Name** field, enter the root text.
3. On the Group Box Dialog box, click the **Advanced** button.
4. In the Root tag section of that dialog, select **Use this element as the Root tag** and press **OK**.



5. Place all other screen elements within the Group Box field.

Tabular Data

The Tabular data button inserts a table into which you can place other types of fields. It's similar to a group box.

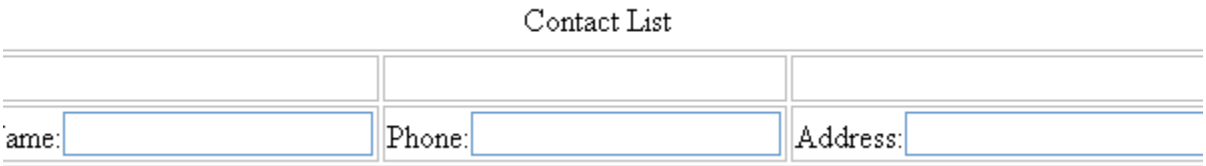
Tabular data's main advantage over a group box is that it lets you place fields in columns (see below).

NOTE "Group Box" on page 228 describes many features that also apply to tabular data. Read that section to gain a full understanding of working with tabular data.

Creating a Table

First you insert the table. Then, you insert an appropriate type of field into each column. As examples, in the table above, the **Description** field type would be plain text, while the **In Stock?** field type would be choices.

If you insert a field into a table and its caption appears to the left of the data entry region (see below), move the caption to the column header (see second illustration below).



To access table commands (such as add row and add column), place the cursor inside a table cell, right click the mouse, and select **Table**.

IMPORTANT! Only table cells into which you place a field are available to visitors of your Web page.

Editing Tabular Data

To edit tabular data, hover the cursor over a table border line until you see a four-headed arrow. Then, click the right mouse button and select **Field Properties**.

NOTE You cannot reduce the number of columns by editing the Tabular Data dialog's **Columns** field. To delete a column, place the cursor in the column and select **Delete Column** from the table commands. The table commands are available in the table drop-down menu, the table toolbar (which is hidden by default), or the right-click context menu.

How Tabular Data Forms XML Structure

Tabular data creates three levels of XML tags:

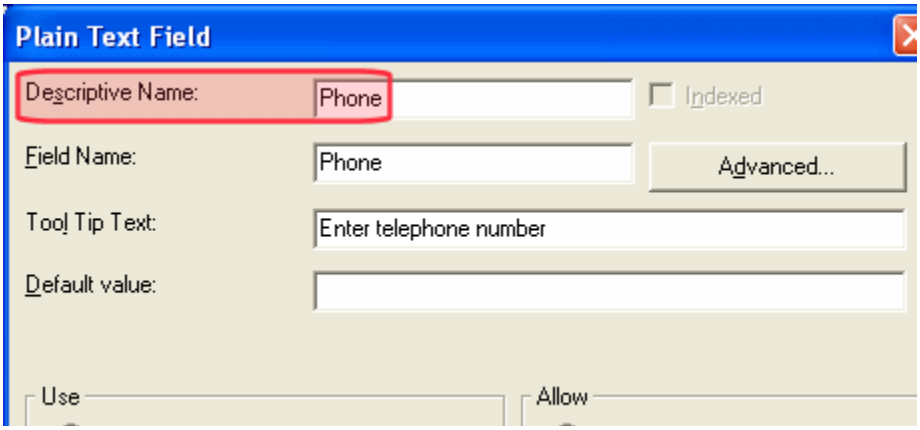
- inner level: each field in the table
- middle level: each row in the table
- outer level: the entire set of table data

To explain how this works, we'll use the following contact list as an example.

Name	Phone	Email
John Doe	555-1212	john.doe@example.com
Mary Smith	555-8765	msmith@example.net

How XML Tags are Assigned to Field Names

When you insert a field into a table, a dialog helps you define the field type. For example, when inserting a plain text field, the Plain Text Field dialog appears. On that dialog, the value of the **Phone** field defines the tags that enclose that field's contents.



To continue our example, every contact is represented in XML as:

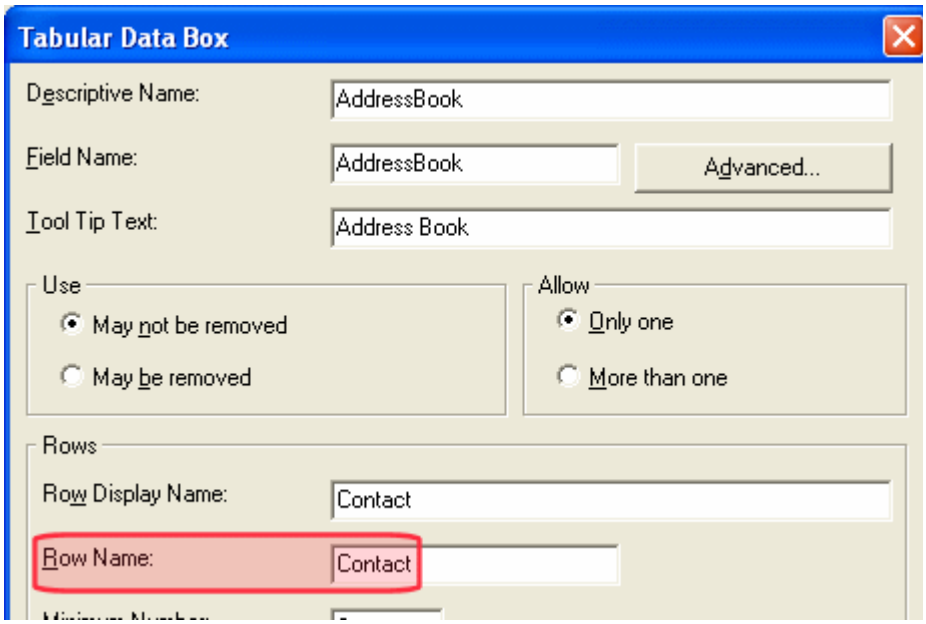
```
<Name>John Doe</Name>
<Phone>555-1212</Phone>
<Email>john.doe@example.com</Email>
```

and

```
<Name>Mary Smith</Name>
<Phone>555-8765</Phone>
<Email>msmith@example.net</Email>
```

How XML Tags are Assigned to Table Rows

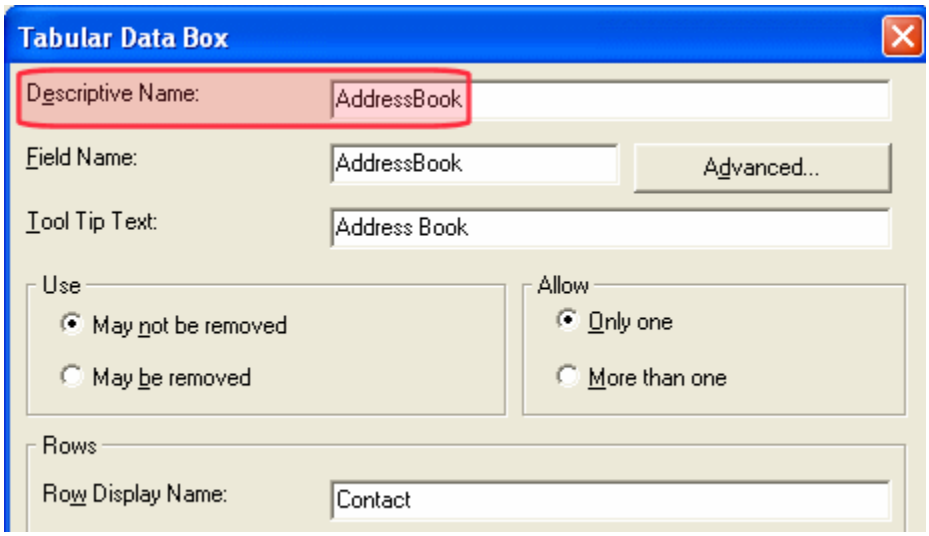
Each row of the table collects information for one contact. On the Tabular Data Box dialog, the **Row Name** field defines the XML tag that groups information for *each contact*. For example, the **Row Name** field value is **Contact**.




```
<Contact>
     <Name>John Doe</Name>
     <Phone>555-1212</Phone>
     <Email>john.doe@example.com</Email>
</Contact>
<Contact>
     <Name>Mary Smith</Name>
     <Phone>555-8765</Phone>
     <Email>msmith@example.net</Email>
</Contact>
```

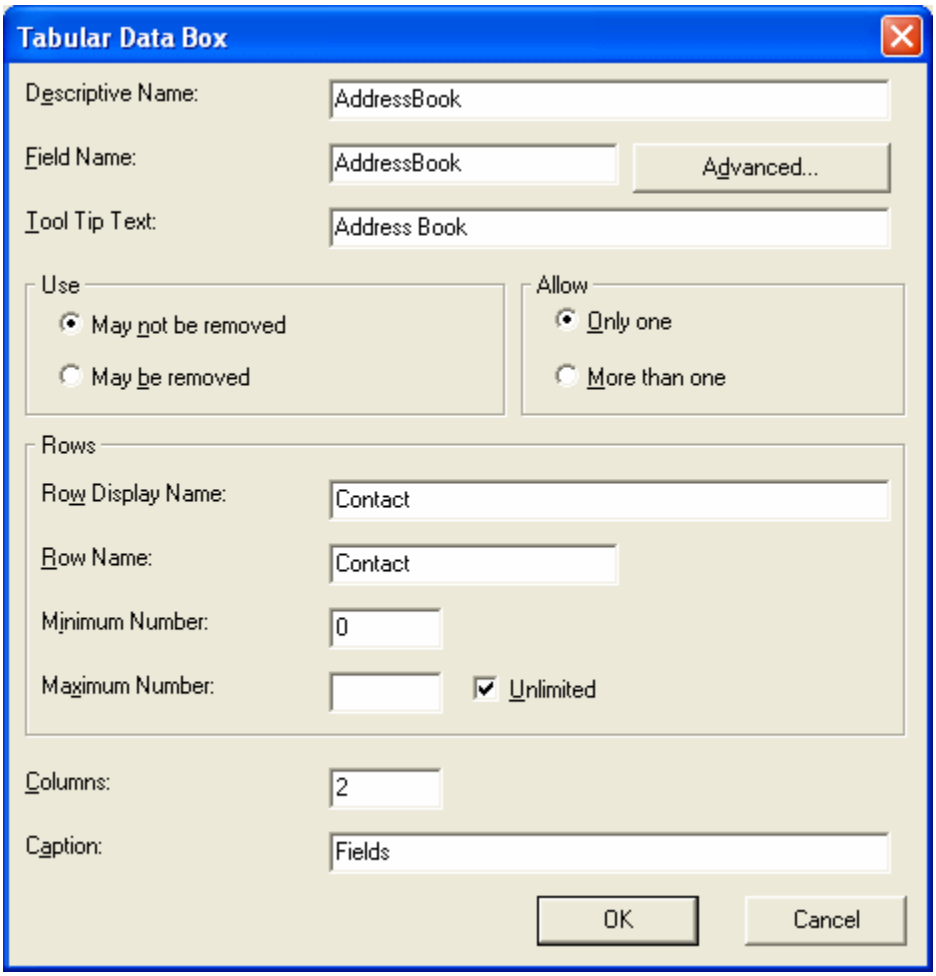
How XML Tags are Assigned to the Entire Table

When you create a table, the name you give it (in the **Name** field of the Tabular Data Box dialog) defines the XML tag that groups *all contacts* on the table. In this example, the name is **AddressBook**.



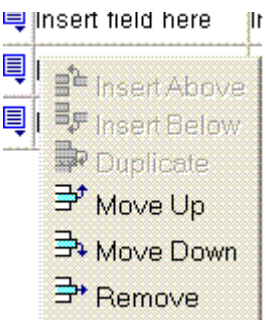

```
<AddressBook>
   <Contact>
       <Name>John Doe</Name>
       <Phone>555-1212</Phone>
       <Email>john.doe@example.com</Email>
   </Contact>
   <Contact>
       <Name>Mary Smith</Name>
       <Phone>555-8765</Phone>
       <Email>msmith@example.net</Email>
   </Contact>
</AddressBook>
```

Dialog Box


Tabular Data Box
Descriptive Name:
AddressBook
Field Name:
AddressBook
Advanced...
Tool Tip Text:
Address Book
Use
May not be removed
May be removed
Allow
Only one
More than one
Rows
Row Display Name:
Contact
Row Name:
Contact
Minimum Number:
0
Maximum Number:
Unlimited
Columns:
2
Caption:
Fields
OK
Cancel

Fields on the Tabular Data Dialog

Field	Description
Descriptive Name	Enter the name of this table. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. The Name Field's Default Value By default, the Data Designer assigns a name made up of **Field** followed by the next available number. So, the first field's default name is **Field1**, the second field's default name is **Field2**, etc. You can change the default if you want.
Field Name	Enter the table's element name. This will define the table in the XML. *See Also:* "How Tabular Data Forms XML Structure" on page 234
Tool Tip Text	Enter the text that appears when a user hovers the cursor over the table's column headers.
Advanced	See "Advanced Button" on page 280
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284 Note: If you check **More than one** here, you are allowing the user to insert an entirely new table, not an additional table row.
Rows	
Row display name	Enter the text that appears when a user hovers the cursor over the table's cells. Use this field to describe the kind of information to be inserted into the table's cells.
Row name	Enter the name of the XML tag used to collect data for each entry in the table. *See Also:* "How Tabular Data Forms XML Structure" on page 234

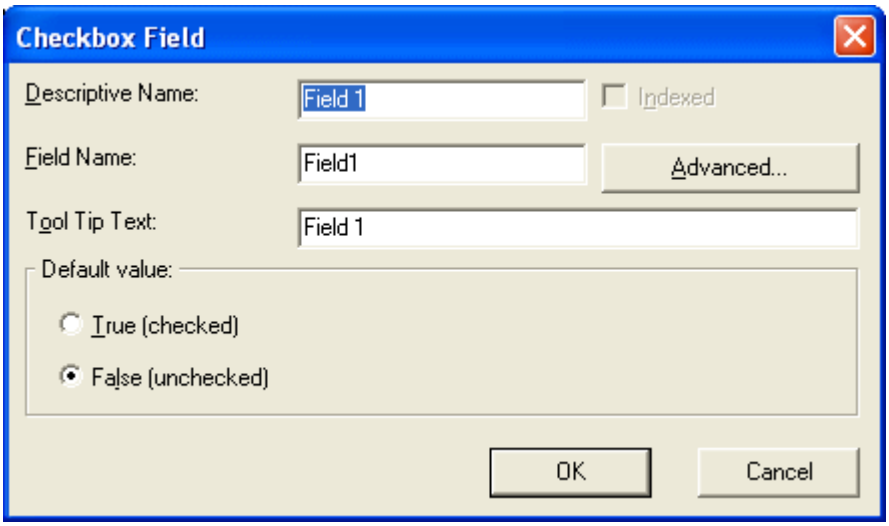
Field	Description
Minimum number	If desired, enter the minimum number of rows for this table. If you enter a number and the data entry user tries to save the screen without inserting at least the minimum number of rows, he is informed that **Element content is incomplete according to the DTD/Schema**. By default, the user is allowed to cancel or save the screen anyway. However, the system administrator determines whether or not the user can save an invalid document.
Maximum number	If desired, enter the maximum number of rows for this table. If you don't want to assign a maximum number, check the **Unlimited** check box. **Result of Assigning a Maximum** When this table appears on a data entry screen, and a user adds the maximum number of rows, the **Insert Above** and **Insert Below** options are grayed out on the menu (see example below). 
Columns	Enter the number of columns to appear in the table. *See Also:* "Editing Tabular Data" on page 234
Caption	If desired, enter text to describe this table on the data entry screen. The caption appears centered above the table. After you insert this field onto the screen, you can use **eWebEditPro+XML**'s formatting capabilities to modify the caption's size, font, color, and other attributes.

Checkbox

A Checkbox field is only one character wide and accepts one of two possible values: checked or unchecked. For example

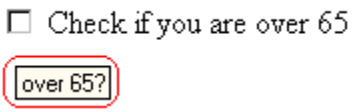
☐ Check if you are over 65

Dialog Box



Fields on the Checkbox Dialog

Field	Description
Descriptive Name	Enter text to guide the user's response to this field. To continue the above example, the caption would be **Check if you are over 65**. After you insert this field onto the screen, the Descriptive Name appears to the right of the checkbox. You can use **eWebEditPro+XML**'s formatting capabilities to modify its size, font, color, and other attributes. Note: The Descriptive Name field only appears on this dialog when you create the Check Box field. If you later try to edit the field, it is not on the dialog. However, you can edit the Descriptive Name text within the editor.
Indexed	Check if you want to index this field. *See Also:* "XML Indexing" on page 203 The **Indexed** field may not appear, depending on how your administrator set up your system.
Field Name	Enter the field's element name. This will define the field in the XML.
Advanced	See "Advanced Button" on page 280

Field	Description
Tool Tip Text	Enter text that appears when a user hovers the cursor over this field (circled in red below). 
Default value	If you want this field to be checked when the screen first appears, click **True**. Otherwise, click **False**.

Plain Text

Use a plain text field when you want the user to enter an unformatted, free text response.

NOTE If a plain text field tries to perform a numerical calculation with a value that is blank or contains letters, `NaN` appears in the field. (`NaN` stands for "not a number.") If a plain text field tries to divide by zero, `Infinity` appears.

NOTE If a plain text field collects a URL, add on-screen instructions to prefix it with `http:\\`. If the user does not, the URL address is not stored properly.

Plain Text Field vs. Rich Area Field

The following capabilities are available with a plain text field but not a rich area field.

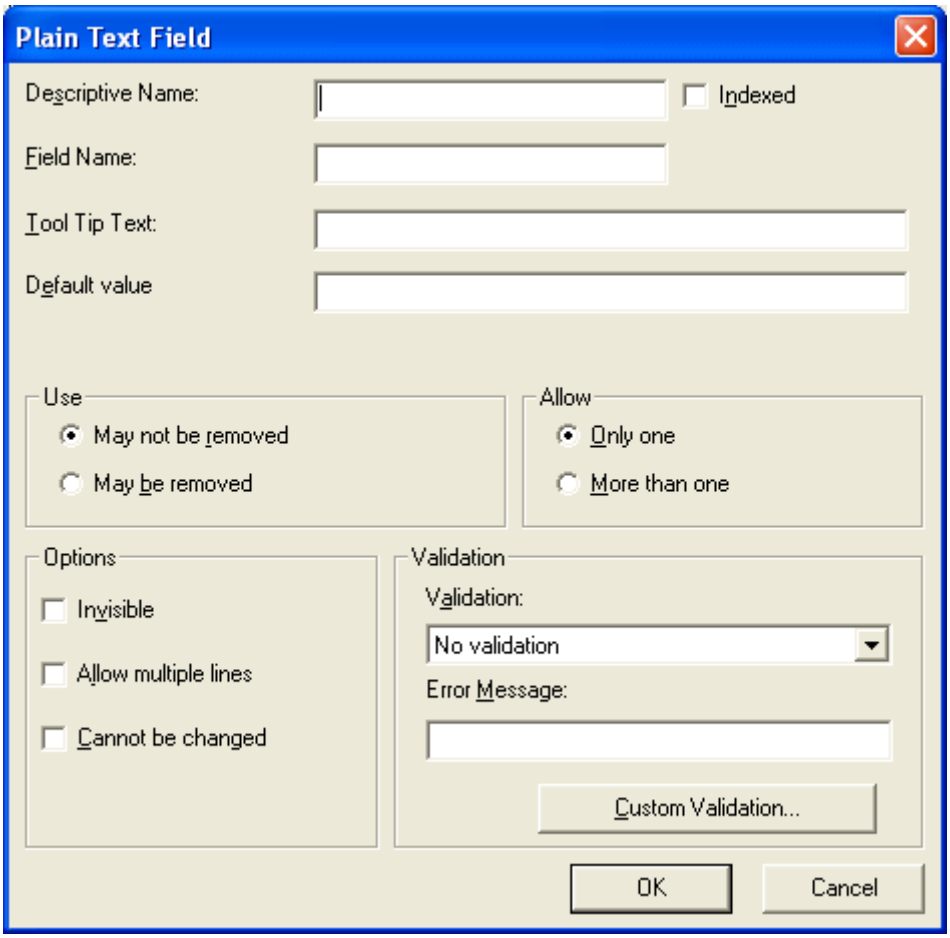
- You can adjust the field's width by dragging it. See "Resizing a Plain Text Field" on page 245.
- The text can be read-only or hidden

The following capability is available with a rich area field but not a plain text field.

- In Data Entry mode, the user can change the text's format, size, style, etc. along with adding hyperlinks, using **eWebEditPro+XML**'s formatting capabilities.

- You can enter custom tags.

Dialog Box



Fields on the Plain Text Dialog

Field	Description
Descriptive Name	Enter the name of this field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230

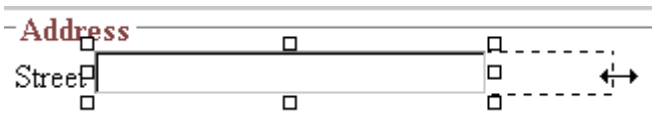
Field	Description
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203. The **Indexed** field may not appear, depending on how your administrator set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Default Value	If you want to set a default value for this field, enter that value here. The default value appears in Data Entry mode, where the user can accept, change, or delete it. For example, if this field collects a city, and most users enter New York, enter `New York` as the value.
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284
Options	**Invisible** - Check here to make this field hidden in Data Entry mode. This option lets you store unseen information in each XML document. An example might be putting a version number for the data design so that XML documents can be upgraded to newer versions using an XSL transform. **Allow multiple lines** - Check here to let this text box expand to accommodate the user's input. If you do not check this box, a single line input box appears on the data entry screen to accept user input. Note: A field can be either invisible or cannot be changed -- it cannot be both. **Cannot be changed** - Check here to make this field read-only. That is, the user cannot insert data into it in Data Entry mode. You might use this option to provide instructions for completing the screen.

Field	Description
Validation	Select the kind of validation to apply to this field. Your choices are: • **No validation** - the user's response is not checked • **Cannot be blank** - the user must enter a response • **Non-negative whole number or blank** - the user must enter a positive whole number *or* no response • **Non-negative whole number (required)** - the user must enter a positive whole number • **Decimal number or blank** - must be a decimal number (for example, 12.345 or 12) or blank . A leading minus sign "-" is allowed. The decimal point must be a period (.), even in locales that normally use a comma (,). Note: Decimal numbers include whole numbers because the decimal point is implied. That is, 12 is 12.0000. • **Decimal number required -** must be a decimal number (it cannot be blank) of none, one, or two decimal places. A leading minus sign "-" is allowed. The decimal point must be period (.), even in locales that normally use a comma (,). • **Percent: (0-100) required -** the user must enter a whole number from 0 to 100 • **Zip code (US only)** - the user's response must consist of 5 (*nnnnn*) or 9 digits separated by a dash after the fifth (*nnnnn-nnnn*) • **Social Security number (US only)** - the user's response must consist of nine digits in this pattern: *nnn-nn-nnnn* • **Custom -** You can create custom validation. For more information, see "Custom Validation" on page 286. If you assign to this field any value other than **No validation**, the field is initially surrounded by red dashes in Data Entry mode. If the user's response does not meet the validation criterion, the field remains surrounded by red dashes. The system administrator determines whether or not the user can save an invalid document.
Data Style	See "The Data Style Field" on page 285

Resizing a Plain Text Field

If you insert a plain text field and its width is too small or too large, you can easily resize it. To do so, follow these steps.

1. Place the cursor over the field and click. The cursor changes to a four-headed arrow, and small boxes surround the field.
2. Move the cursor to the far right of the field. (See illustration below). The cursor turns into a two-headed arrow.



3. Drag the arrow to adjust the width.

Rich Area

Use a rich area field to let a user enter a free text response that can be formatted using the editor buttons.

See Also: "Plain Text Field vs. Rich Area Field" on page 242

NOTE If a rich area field collects a URL, add on-screen instructions to prefix it with `http:\\`. If the user does not, the URL address is not stored properly.

Adjusting the Width of a Rich Area Field

Note that, unlike a plain text field, the width of a rich area field cannot be adjusted. It occupies the entire screen width. If a user enters more text than fits on one line, the rich area field automatically adds more lines. To limit the width of a rich area field, place it in a table cell. In this case, the field is as wide as the cell.

If you want to insert default text into a rich area field, insert it after you place the field in the editor.

Dialog Box

Fields on the Rich Area Dialog

Field	Description
Descriptive Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203 The **Indexed** field may or may not appear, depending on how your administrator set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284

Field	Description
Cannot be blank	If you want to require the user completing this field to enter a response, click inside this check box.

Choices

Use the Choices field when you want to give the data entry user several options. For example, you create a Choices field named **Interests** that lists these options.

- music
- art
- sports

The data entry user could check the first two and leave the third blank.

Choices Field vs. Select List Field

The following capabilities are available with a Choices field but not a Select List field.

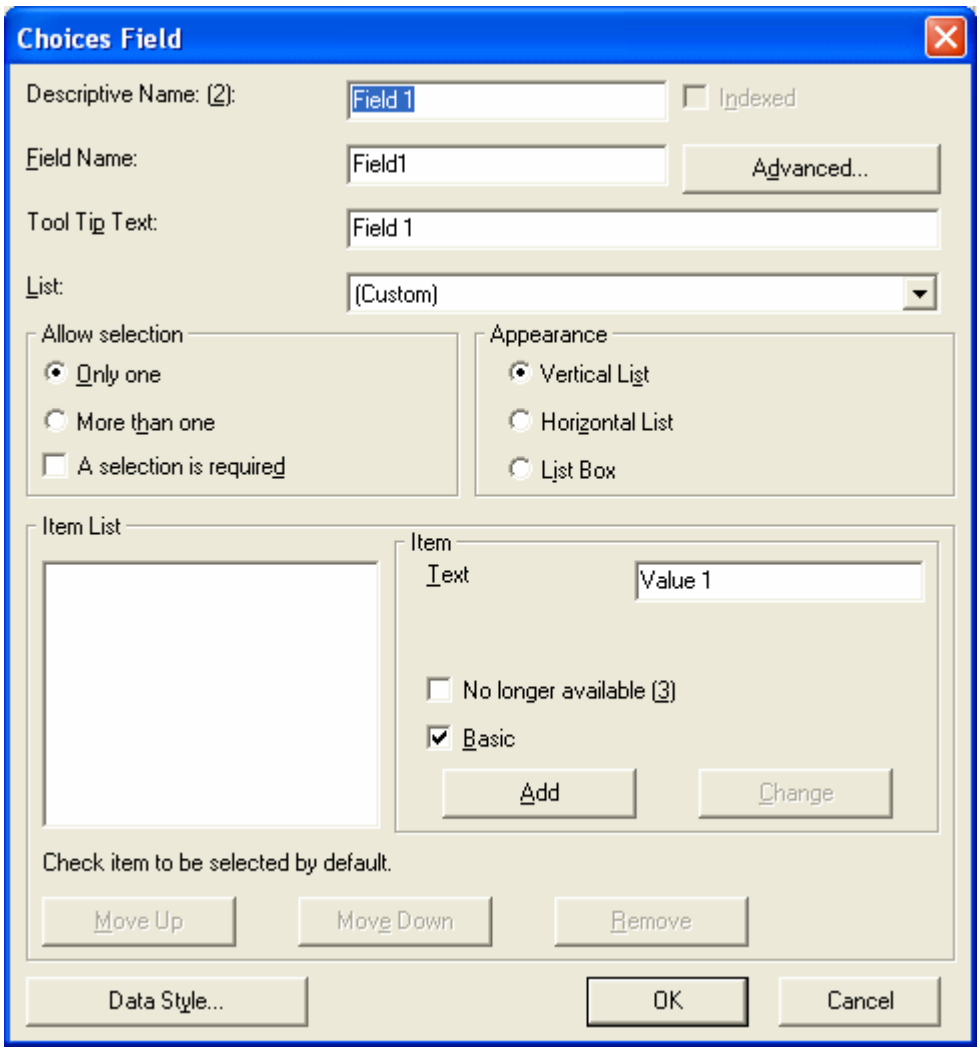
- You can limit a user's choice to one item or allow more than one
- All items appear on the screen, arranged horizontally or vertically
- If one item is set as the default in the Smart Form Configuration, it is initially checked. The data entry user can change the selection as needed.

The following capabilities are available with a Select List field but not a Choices field.

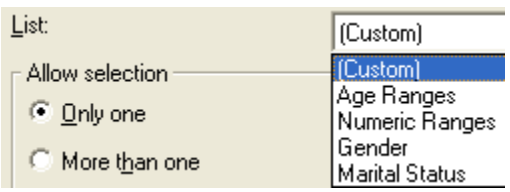
- The user can only select one item.
- Only the default item appears on the screen. To the right of the field, a down arrow appears (circled in red below). The user clicks the arrow to display all items and select one.

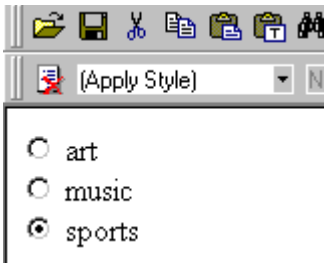
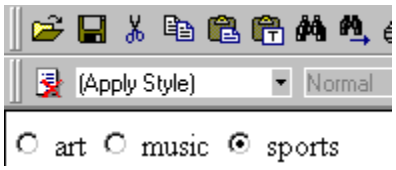
t:
sports
music
art
sports

Dialog Box


Choices Field
Descriptive Name: (2):
Field 1
Indexed
Field Name:
Field1
Advanced...
Tool Tip Text:
Field 1
List:
(Custom)
Allow selection
Only one
More than one
A selection is required
Appearance
Vertical List
Horizontal List
List Box
Item List
Item
Text
Value 1
No longer available (3)
Basic
Add
Change
Check item to be selected by default.
Move Up
Move Down
Remove
Data Style...
OK
Cancel

Fields on the Choices Dialog

Field	Description
Descriptive Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203 The **Indexed** field may or may not appear, depending on how your administrator set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this choice list.
List	**Using a Standard List** If you want to use one of **Ektron CMS400.NET**'s standard lists, click the black down arrow next to the field to see a list of options.  If you choose a standard list, it appears in the lower half of the screen. You cannot change its values. **Creating a Custom List from Scratch** To create your own set of list options, accept the default value, **Custom**. Then, enter the values using the **Item** field.

Field	Description
Allow selection	Click **More than one** to let the data entry user select more than one item on the data entry screen. Otherwise, click **Only one**. For example, if you click **More than one**, and the choices are: music, art, sports, the user could select all three choices. If you click **Only one**, the user can only select one. **A selection is required -** Check this box if the user must select at least one list item.
Appearance	Click **Vertical List** to arrange the choices vertically. The user selects items by clicking the radio button.  Click **Horizontal List** to arrange the choices horizontally.  Click **List Box** to arrange the choices vertically in a box. The user selects items by clicking inside the box.

Field	Description
Item List	This section of the screen displays the items that you enter in the **Value** and **Text** fields. Buttons near the bottom of the screen let you remove and rearrange items from this list. Place a check in the box of any item to be checked by default on the data entry screen. If you do, the user can accept the default or uncheck the item by clicking in the checkbox. Note that if **Only One** is selected under **Allow selection** (above), only one item can be selected.
Value	Enter the value that is collected when the data entry user selects this item. For example, if **Interests** appears in the Name field, and you want `music` to be collected when the data entry user selects this item and saves the page, enter **music** here.
No longer available	See "No longer available" on page 255
Basic	Check this box if you want this item's XML tag to be the same as its name on the screen. If you want the XML tag to be different from the screen name, uncheck this box. When you do, a new field appears, **Value**. Enter the XML tag into this field.
Data Style	See "The Data Style Field" on page 285

Select List

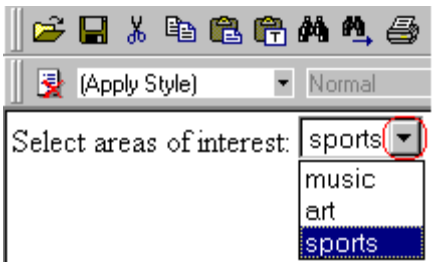
A Select List field is similar to a Choices field. The biggest differences are

- all responses appear in a drop-down box instead of appearing separately
- the user can only select one response. If you want to allow the user to select more than one response, use a choice list instead. *See Also:* "Choices" on page 248

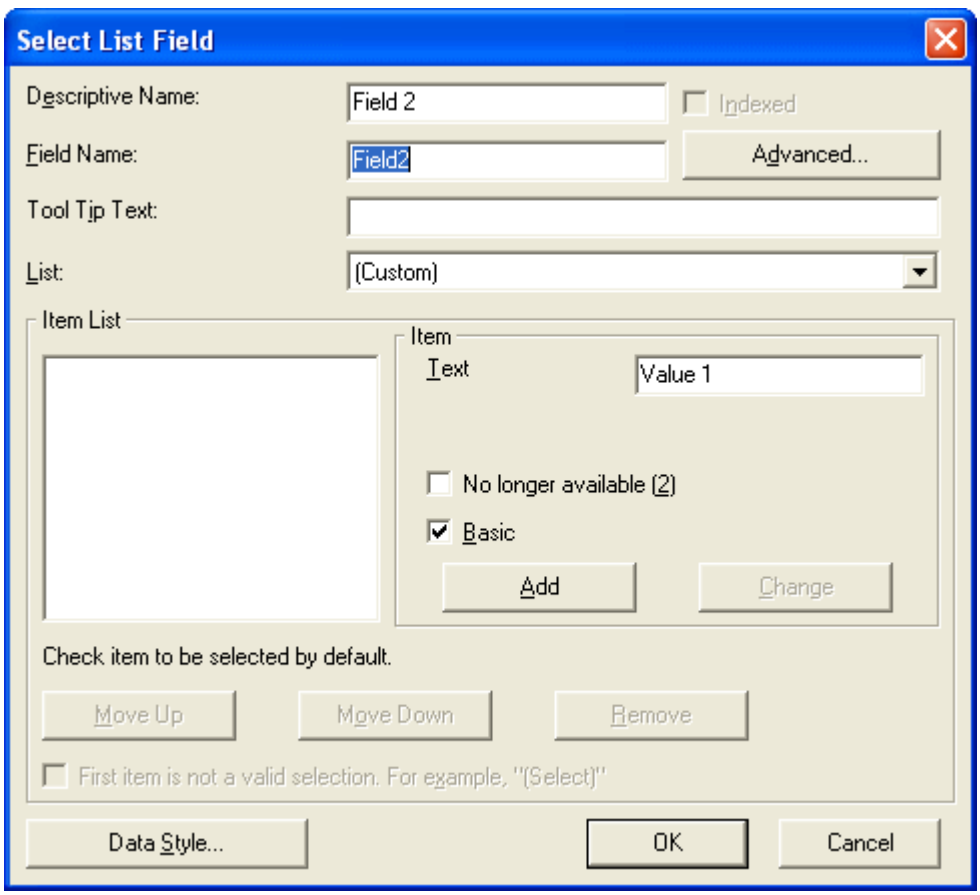
To see the choices, click the down arrow on the right side of the box (circled below).

See Also: "Choices Field vs. Select List Field" on page 248

For example:



Dialog Box



Fields on the Select List Field Dialog

Field	Description
Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203. The **Indexed** field may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this list.
List	**Using a Standard List** If you want to use one of **Ektron CMS400.NET**'s standard lists, click the black down arrow next to this field to see your choices. If you choose a standard list, it appears in the lower half of the screen. You cannot change its values. *See Also:* "Creating Your Own Predefined List" on page 256 and "Creating a Dynamically Populated Choice List" on page 257 **Creating a Custom List from Scratch** To create your own set of list options, accept the default value, **Custom**. Then, enter the values using the **Item** field.

Field	Description
Item List	This section of the screen displays the items that you enter in the **Value** and **Text** fields. Buttons let you remove items from this list as well as rearrange them. Place a check in the box of any item to be checked by default on the data entry screen. If you do, the user can accept the default or uncheck the item by clicking in the checkbox.
Value	Enter the value that is collected when the data entry user selects this item. For example, if **Interests** appears in the Name field, and you want `music` to be collected when the data entry user selects this item and saves the page, enter **music** here.
Text	Enter text to describe this item on the data entry screen. After you insert this field onto the screen, you can use **eWebEditPro+XML**'s formatting capabilities to modify its size, font, color, and other attributes.
No longer available	Use this field to indicate that an item can no longer be selected by a user in data entry mode. For example, you have a list of team members. If one member leaves, check **No longer available** rather than removing the member. If checked, the item only appears in data entry mode *if* a document contained the item when the check is applied. This field lets you render a value obsolete without invalidating an existing XML document. **Exception!** -- If multiple selections are allowed in a Choices Field and the item is selected in design mode, it appears in data entry mode but is disabled (grayed-out). This lets you force an item's value into the XML document.
Basic	Check this box if you want this item's XML tag to be the same as its name on the screen. If you want the XML tag to be different from the screen name, uncheck this box. When you do, a new field appears, **Value**. Enter the XML tag into this field.
First item is not a valid selection. For example, "(Select)"	Check here if the first item on the list is not a valid value but instead text that prompts the user to respond to the field. An example of such text for a list of states is **Select a state**. If you check this box and the user selects the first value on the list (most likely by default), an error message appears when he tries to save the screen.

Field	Description
Caption	Enter text to guide the user's selection. For example, if the user needs to select an area of interest, the caption could be **Choose your interests**. Note: The **Caption** field only appears on this dialog when you create the Select List field. If you later try to edit the field, the Caption field is not on the dialog. However, you can edit the Caption text within the editor.
Data Style	See "The Data Style Field" on page 285

Creating Your Own Predefined List

An administrator can create a predefined list of options to appear when a user is inserting a **Select List** field.

Advantage of Creating Custom List in Configuration File

Although a user can create a custom list of choices via the **Item List** area of the Select List Field dialog, that list is only available in that field of that screen. If the user wants to insert the same list in another section of the screen or a different screen, he must re-enter all options.

However, if you create a list according to the steps below, your custom list is stored in the configuration file (along with the standard choice lists, such as **Countries**). As a result, any user connected to your server can insert the list into any **Select List** field on any screen.

Creating the List

To insert a custom list of choices, follow these steps.

1. Open the eWebEditPro+XML configuration file. If you are working with eWebEditPro+XML, this is *webroot*`/ewebeditpro5/config.xml`.

   If you are working with CMS400, this is *webroot*`/Workarea/ewebeditpro/cms_config.aspx`.

2. Insert the name of your list into the following section of the configuration file. In the sample below, the custom list is `MyNewList`.

```
<selections name="datalists">
     <listchoice data="MyNewList">My New List</listchoice>
    <listchoice data="languages" localeRef="sLanguages" />
    <listchoice data="countries" localeRef="sCountries" />
    <listchoice data="USPS-US" localeRef="sUSState" />
    <listchoice data="USPS-CA" localeRef="sCaPrvnc" />
    <listchoice data="ageRange" localeRef="sAgeRng" />
    <listchoice data="numRange" localeRef="sNumRng" />
    <listchoice data="years" localeRef="sYrs" />
</selections>
```

3. Find the `<dataentry>` element of the configuration file.
4. Insert the new list within that element. Below is an example of such a list.

```
<datalist name="MyNewList">
        <schema datatype="string" />
   <item default= "true" value= "Green" />
   <item value= "Red" />
   <item value= "Blue" />
</datalist>
```

Note that

- the `<datalist>` element contains the list
- its `name` must match the `listchoice data` value you entered in Step 2
- you can specify a data type. Values are string, nonNegativeInteger, date, decimal.
- as shown in the third line above, you can specify a default value

Creating a Dynamically Populated Choice List

You specify the elements of the custom options list described above in the configuration data. You can also create a dynamically-populated list from any XML source. The source can be on your server or on a remote Web site. Follow these steps to add a dynamic data list to the **Select List** field.

1. Follow steps 1 through 3 in ”Creating the List” on page 256.

2. Insert a new datalist item according to this pattern.

```
<datalist name="MyNewList" src="{url to xml data source}" select="{xpath to data item
element}" captionxpath="{relative xpath to data item's display text}" valuexpath="{relative
xpath to data item's value}">
```

WARNING! The `datalist name` must match the `listchoice data` attribute.'

For example

```
<datalist name="USPS-CA" src="[eWebEditProPath]/uspsca.xsd" select="/xsd:schema/
xsd:simpleType/xsd:restriction/xsd:enumeration" captionxpath="xsd:annotation/
xsd:documentation" valuexpath="@value" namespaces="xmlns:xsd='http://www.w3.org/2001/
XMLSchema'" validation="select-req">
```

In this example, the data list is stored in the uspsca.xsd file, located within the `ewebeditpro` folder. However, it could be in any XML data source.

Calculated Field

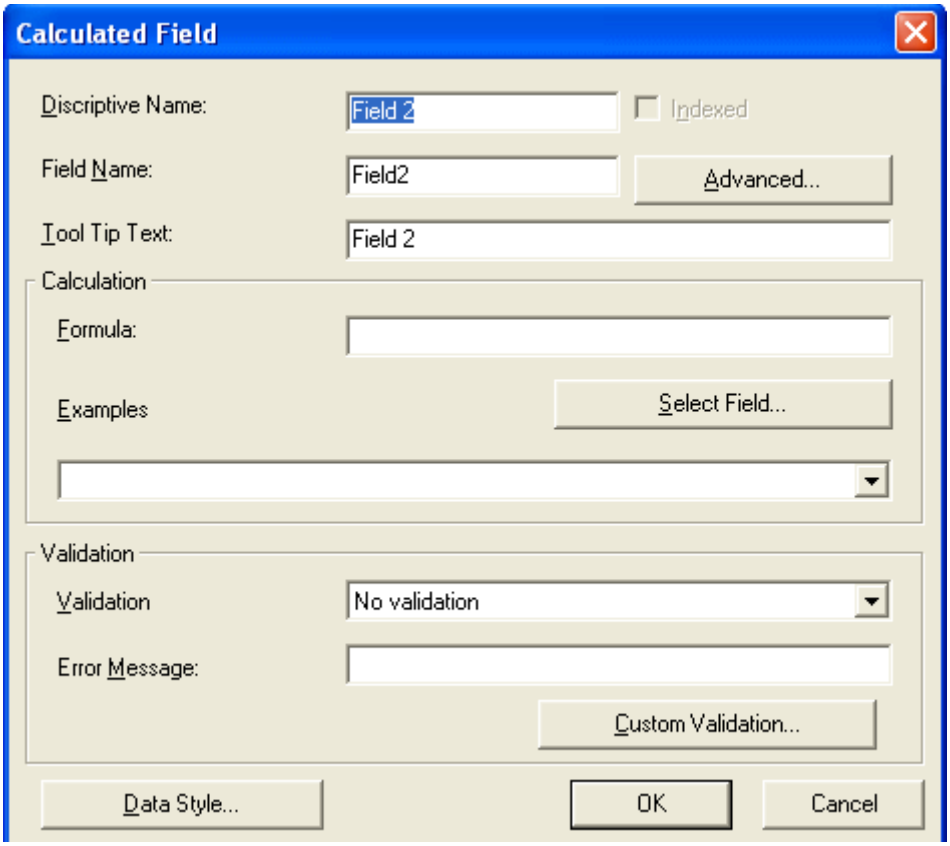
Use a calculated field to perform a calculation based on values in other fields. For example, if your screen collects mortgage information, you could create one field to collect the mortgage and interest payment and another to collect taxes and insurance. The calculated field could sum those two numbers and display the monthly payment.

You can validate a calculated field. For example, you can require a positive number between 100 and 1,000.

Calculated fields are display only -- users cannot edit them.

IMPORTANT! If a field will be referenced in a calculation, use the validation feature to require a value for that field. This forces the user to enter a number to be used in the calculation.

Dialog Box



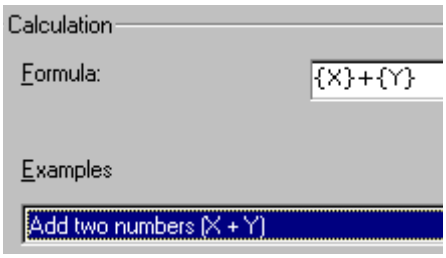
Fields on the Calculated Field Dialog

Field	Description
Descriptive Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203. The **Indexed** field may or may not appear, depending on how your administrator has set up your system.

Field	Description
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Formula	Enter the calculation that this field will perform. *See Also:* "Using the Formula Field" on page 261
Select Field	Click this button to select a field to reference in the calculation. For more information, see "Using the Formula Field" on page 261.
Examples	Click the down arrow to the right of this field to see examples of calculations you can perform. When you select an example, it is copied into the **Formula** field. Note: Your system administrator can customize the examples. Instructions are provided in "The <cmddsgcalc> Command" in the Data Designer chapter of the Developer Reference Guide. *See Also:* "Explanation of Examples" on page 263
Validation	Select the kind of validation to apply to this field. Your choices are: • **No validation** - the user's response is not checked • **Non-negative number (required)** - the result of the calculation must be a positive number If you assign to this field any value other than **No validation**, the field is surrounded by red dashes in Data Entry mode. If the user's response does not meet the validation criteria, the field remains surrounded by red dashes. Your system administrator determines if a user can save a screen with invalid data.
Error message	If you select **Non-negative number** above, insert text that appears on the screen if the user's response does not meet this criterion.
Custom Validation	See "Custom Validation" on page 286
Data Style	See "The Data Style Field" on page 285

Using the Formula Field

You can copy a sample calculation into the **Formula** field by clicking the **Examples** field and selecting an operation from the drop down list. For example, if you click **Examples Add two numbers {X}+{Y}**, **{X}+{Y}** appears in this field.



Next, replace the variables with fields on the screen. Be sure to select the curly brackets ({}) as well as the letter between them. Then, when the user enters data into those fields, the calculation is performed using the current field values.

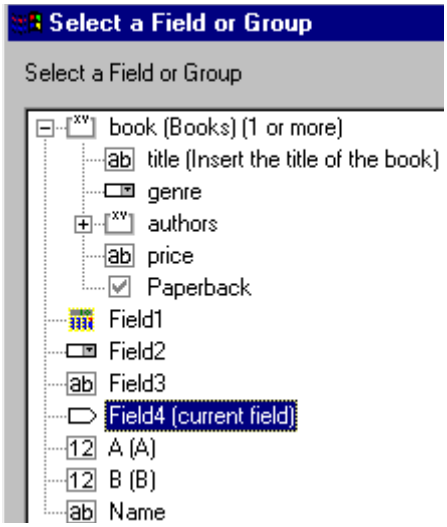
If a calculated field tries to perform a numerical calculation with a value that is blank or contains letters, `NaN` appears in the field. (`NaN` stands for “not a number.”)

If a calculated field tries to divide by zero, `Infinity` appears.

WARNING! If the user does not replace *all* variables with a field or a number, when the content is validated, validation will fail.

To do this, follow these steps.

1. Select the first variable to replace. To continue the example, select **{X}**.
2. Click the **Select Field** button. A screen appears listing appropriate fields on the Data Design screen.



3. Select a field to replace **{X}**. When you do, the field name replaces **{X}** in the **Formula** field.

WARNING! If a variable appears more than once in a formula (for example, `{X} * number( {X} <= {Y} ) + {Y} * number( {X} > {Y})`, you only need to replace the first occurrence - **eWebEditPro+XML** replaces subsequent occurrences for you.

4. Continue replacing all variables in the formula.

Notes

- If an XML document contains several occurrences of a field that is referenced in a formula, the value is derived as follows:
  - When using the XPath functions `sum()` and `count()`, all values with the field name are considered. For example, a document includes three books whose prices are $10, $20 and $30. In this case, `sum`'s value is $60.
  - When using all other functions, the first value is used. For example, a document includes three books whose prices are $10, $20 and $30. If a calculation formula refers to `<price>`, its value is $10.
- You can replace a variable with a number instead of a field. For example, replace `{X} * {Y}` with `../price * 1.15`.
- The expression can be complex, such as `(round(Field1 * 0.80) + (1 div Field2)) - 2`.

- You can use a string expression that creates a text message. For example, to calculate a full name from its parts: `concat( title, ' ', givenname, ' ', familyname)`, which could produce “Dr. Jonathan Smythe”.

Referencing Other Calculated Fields

A calculated field can only reference other calculated fields that appear before it in a document. For example, a document collects a series of numbers.

- One calculated field counts the number of numbers.
- Another totals their values.
- A third computes the average by dividing the total by the count.

In this example, you must place the third field below or to the right of the first two fields. Calculated fields that are defined later in a document do not appear in the Select Field or Group dialog.

Explanation of Examples

The following table explains the standard examples that appear in the **Examples** drop-down list of the Calculated Field dialog. Note that your system administrator can customize the list, so it may not match what is below.

Example Field Text	Example Field Formula	Description
Add two numbers	{X} + {Y}	Add the value in the first field (X) to the value in the second field (Y).
Subtract two numbers	{X} - {Y}	Subtract the value in the second field (Y) from the value in the first field (X).
Multiply two numbers	{X} * {Y}	Multiply the value in the first field (X) by the value in the second field (Y).
Divide two numbers	format-number({X} div {Y} ,'0.###')	Divide the value in the first field (X) by the value in the second field (Y).

Example Field Text	Example Field Formula	Description
Format as a percentage	format-number({X} div {Y} ,'#0%')	Determine what percentage one number (X) is of another (Y). For example, if {X}=10 and {Y}=100, the result of the calculation is 10%.
Absolute value of a number	{X} * (number({X} > 0)*2-1)	The number regardless of the sign (negative or positive).
Minimum of two numbers	{X} * number({X} <= {Y}) + {Y} * number({X} > {Y})	The smaller of two field values.
Maximum of two numbers	{X} * number({X} >= {Y}) + {Y} * number({X} < {Y})	The larger of two field values.
Zero if subtraction is negative	({X} - {Y}) * number(({X} - {Y}) > 0)	Subtract one number (Y) from another (X). If the difference is less than zero, insert zero.
Multiply by another number if checkbox is checked	`{X} * ( {Y} * number( {Z} ='true') + number( {Z} !='true'))`	X is a numeric field. Y is another numeric field to multiply by X if a checkbox is checked. Z is the checkbox. For example, {X}=2 and {Y}=3 • if the checkbox is checked, the result is 2 * 3, which is 6 • If the checkbox is not checked, the result is 2
Round a decimal number	round({X})	Rounds the number to the nearest integer. For example, `round(3.14)`. The result is 3.
Round up a decimal number	ceiling({X})	Returns the smallest integer that is greater than the number. For example, `ceiling(3.14)`. The result is 4. For negative numbers: ceiling(-3.14) = -3

Example Field Text	Example Field Formula	Description
Round down a decimal number	floor({X})	Returns the largest integer that is not greater than the number argument. . For example, `floor(3.14)`. The result is 3. For negative numbers: floor(-3.14) = -4
Format decimal number 0.00	format-number({X} ,'0.00')	Rounds a value either up or down to the hundredth place. As examples, 100 becomes 100.00, and 3.14159265 becomes 3.14.
Total numeric values from multiple fields	sum({X}[text()] | {Y}[text()] | {Z}[text()]))	Add the values in all referenced fields. Only elements that contain a value are summed. Empty elements are excluded.

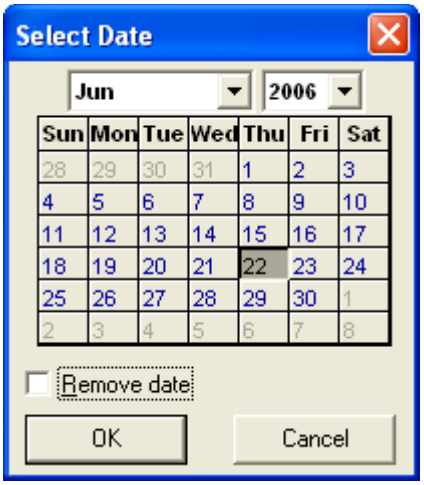
Total a list of numeric values	sum({X}[text()])	Total all values in a single repeating field. Here's an example.
		Plain Text Field properties
		Name: Miles
		Allow: more than one
		Validation: non-negative whole number
		XML Data
		`<root>`
		`<Miles>89</Miles>`
		`<Miles>12</Miles>`
		`<Miles>23</Miles>`
		`<Miles>19</Miles>`
		`</root>`
		sum(Miles) equals 89+12+23+19=143
		Only elements that contain a value are summed. Empty elements are excluded.

Example Field Text	Example Field Formula	Description
Average a list of numeric values	format-number(sum({X}[text()]) div count({X}),'0.###')	Calculate the average of all values in a single repeating field. To continue the example from the **Total a list of numeric values field** (above): Plain Text Field properties Name: Miles Allow: more than one Validation: non-negative whole number XML Data <root> <Miles>89</Miles> <Miles>12</Miles> <Miles>23</Miles> <Miles>19</Miles> </root> Average=89+12+23+19=143 divided by the number of values (4)= 35.75 Only elements that contain a value are summed. Empty elements are excluded.
Count the number of values in a list	count({X})	Calculate the number of values in a single repeating field. To continue the example from the **Total a list of numeric values field** (above): Plain Text Field properties Name: Miles Allow: more than one Validation: non-negative whole number XML Data <root> <Miles>89</Miles> <Miles>12</Miles> <Miles>23</Miles> <Miles>19</Miles> </root> Count = 4

Example Field Text	Example Field Formula	Description
Lowercase text	translate({X} ,'ABCDEFGHIJKLMNOPQRSTUVWXYZ','abcdefghijklmnopqrstuvwxyz')	Replace all uppercase characters with the lowercase version of that character
Uppercase text	translate({X} ,'abcdefghijklmnopqrstuvwxyz','ABCDEFGHIJKLMNOPQRSTUVWXYZ')	Replace all lowercase characters with the uppercase version of that character
Remove extra spaces	normalize-space({X})	Remove extra space characters from content\
Concatenate text	concat({X} , ' , ' , {Y})	Link text strings together into a single string. For example, `concat('The',' ','XML')` yields `The XML`.
Size of a text string	string-length({X})	Count the number of characters in a selected field's value. For example, if the referenced field's value is Hello, string-length = 5.

Calendar Field

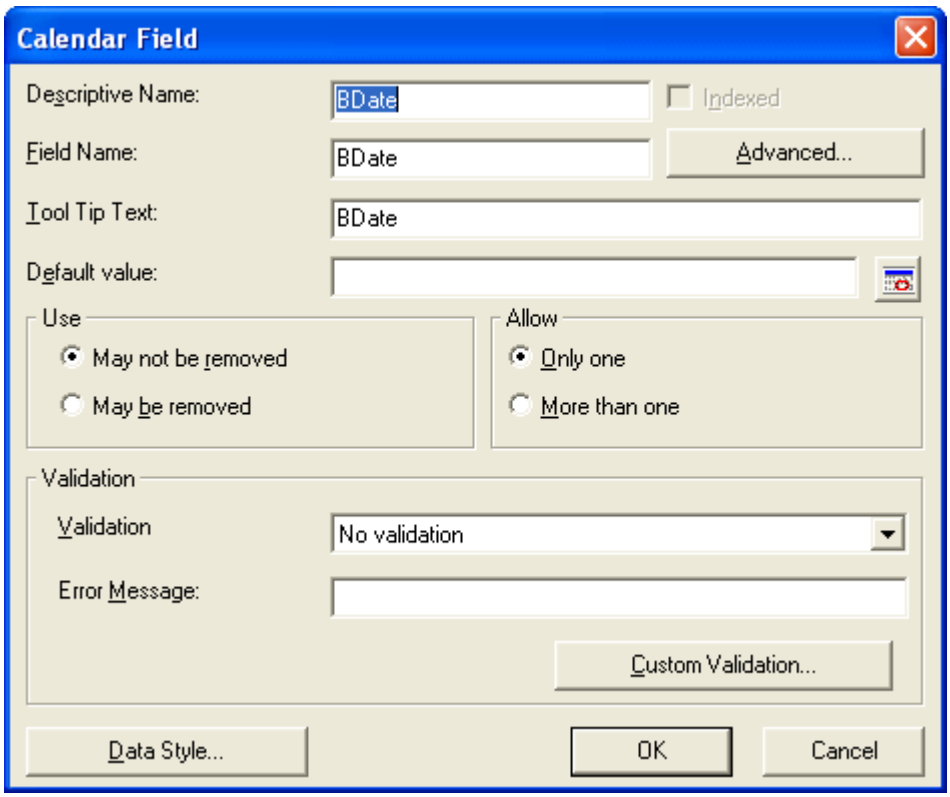
Insert a calendar field when you want the end user to enter a date. The user must click a date from an interactive calendar.



Because users cannot enter digits, a standard date format is ensured.

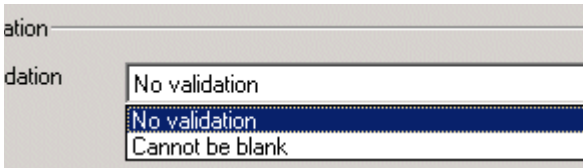
The date is stored as a standard XML date (in the format yyyy-mm-dd), and localized to the computer of the user viewing it.

Dialog Box



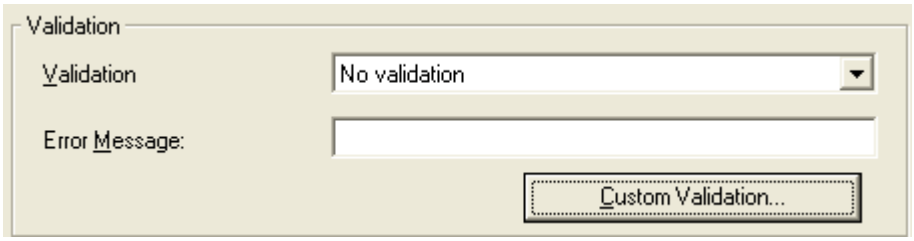
Fields on the Calendar Field Dialog

Field	Description
Descriptive Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|`~) into this field. *See Also:* "The Name Field's Default Value" on page 230
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203 The **Indexed** field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Default value	If you want this screen to have a default date when the user first sees it, click the calendar icon to the right and select a date. The user can change the date in Data Entry mode. Note: If you enter a default date, you cannot later remove it. You can change it. If necessary, you can delete the field and enter a new one.
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284 Warning! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

Field	Description
Validation	If you want to require the user using the calendar to enter a response, click the down arrow to the right of this response field and select **Cannot be blank**. 
Error Message	If you select **Cannot be blank** above, insert text that appears on the screen if the user's response does not meet this criterion.
Data Style	See "The Data Style Field" on page 285
Custom Validation	See "Custom Validation with a Calendar Field" on page 270
Data Style	See "The Data Style Field" on page 285

Custom Validation with a Calendar Field

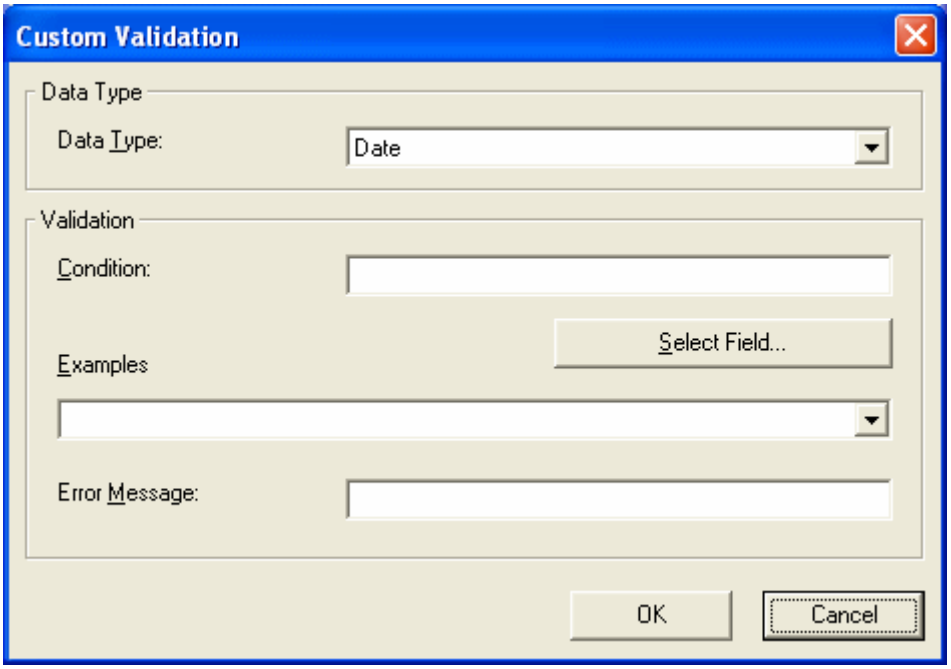
The Calendar Field dialog features a Custom Validation button (illustrated below).



When you click the button, the Custom Validation screen appears. The screen can ensure the user's input is greater or less than the date you are inserting on the Data Design screen.

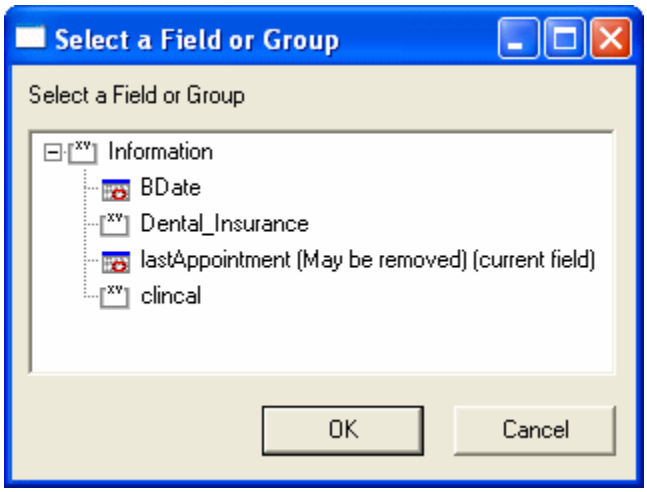
You can compose an error message that appears if the user's response fails to meet the criteria. Your system administrator determines if a user can save the invalid data.

When the **Custom Validation** button is clicked, the Custom Validation dialog appears.



- The **Data Type** field shows **Date**.
- The **Condition** field displays the validation logic.
- The **Examples** drop-down list shows validation expressions that you can apply to the field.
- Any **Error Message** displays in Data Entry mode when the user inserts an invalid value.

When the **Select Field** button is clicked, the Select a Field or Group dialog appears.

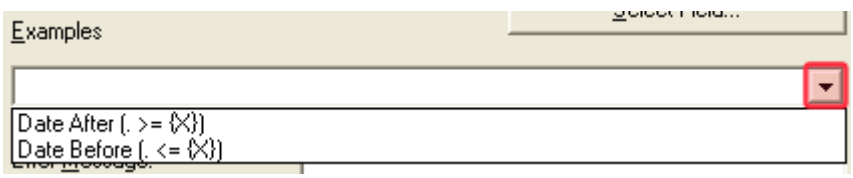


This dialog displays fields that can be inserted into the **Condition** field. Not all field types are listed. You must choose calendar type field (note the calendar to the left of these fields.)

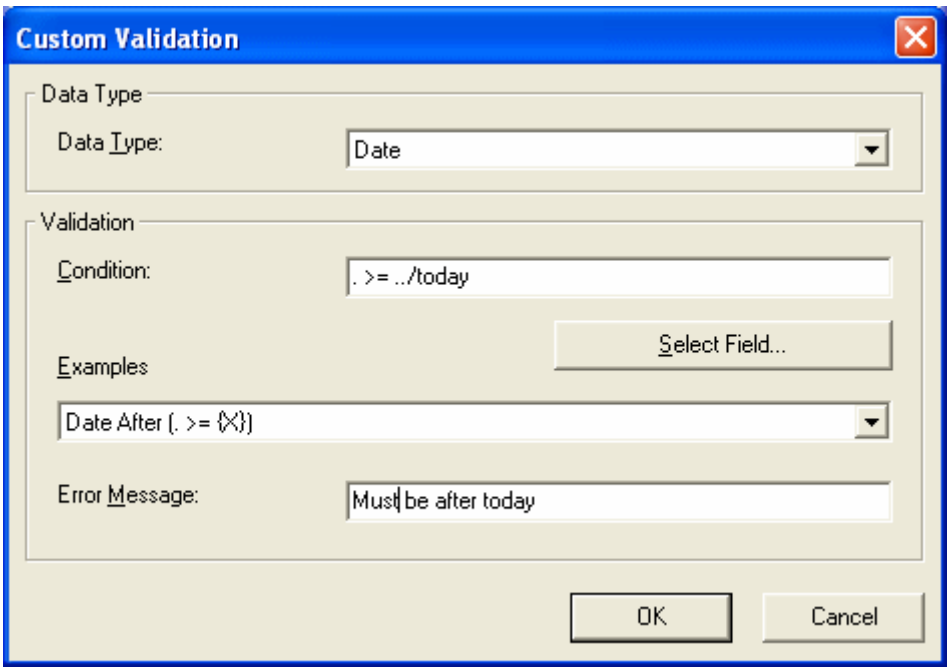
Example of Creating Custom Validation

As an example of custom validation, assume that a field collects the date when a patient's health insurance policy expires. You want to make sure the date is later than today. To accomplish this, follow these steps.

1. Create a calendar field that prompts for today's date.
2. Create another calendar field that prompts for a patient's health insurance policy expiration date.
3. While creating the second field, in the **Validation** section, click **Custom Validation**.
4. The Custom validation screen appears.
5. Click the down arrow to the right of the **Examples** field to see sample logic.



6. Click **Date After (. >={X})**. This option lets you specify that the user's response must be later than a specified date.
7. In the **Condition** field, select **{X}** and click the **Select Field** button.
8. The Select Field or Group screen appears.
9. Select the field that prompts for today's date, which you created in Step 1.
10. That field replaces **{X}** in the **Condition** field.
11. Move the cursor to the **Error Message** field and compose an error message. For example: `Must be after today`.
12. Your screen should look like this.



13. Press **OK** and return to the **Plain Text** field dialog.
14. Press **OK** to save that dialog and test the validation on the date field. To do this, switch to Data Entry mode and enter a date earlier than today to verify that validation works as expected.

Image Only Field

Use an Image Only field to place an icon on the screen, which the user in Data Entry mode can click to insert an image into the Web content. You can insert a default image if desired.

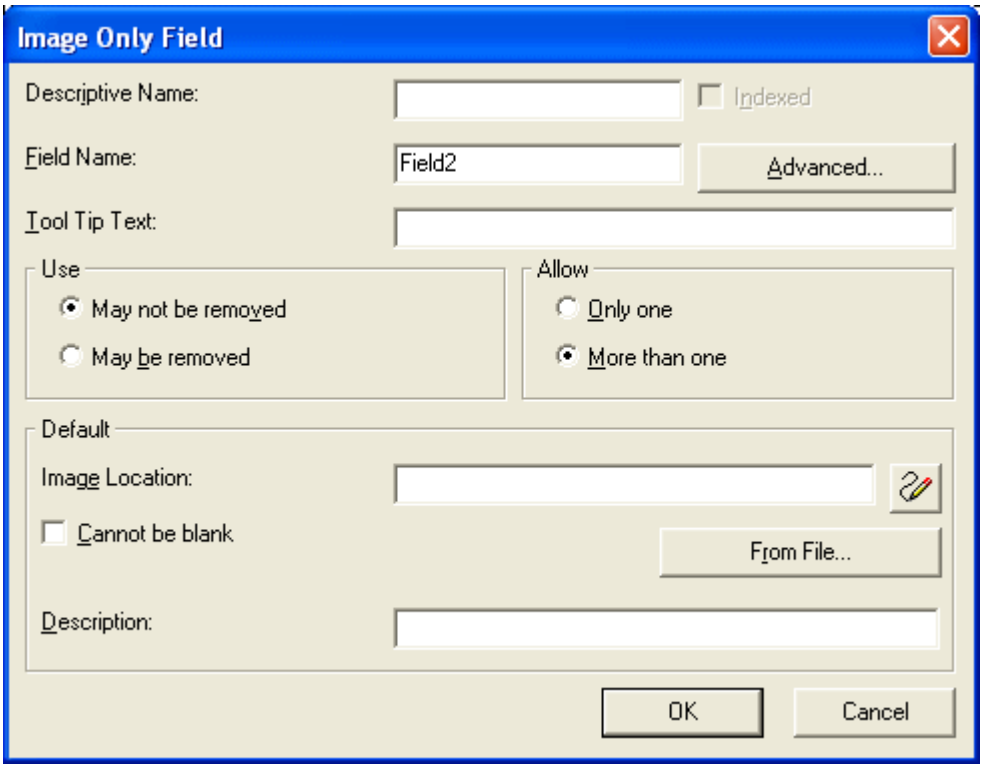
To let the user insert any file, such as a Microsoft Word document, use a File Link field. *See Also:* "File Link Field" on page 276

Using an Image Only Field in Data Entry Mode

In Data Entry mode, the image's caption appears, followed by a default image (if you specify one) and this icon: .

NOTE The user can only insert a file whose extension is defined within the `<validext>` element of the configdataentry.xml file. Your system administrator can help you do this.

Dialog Box



Fields on the Image Only Dialog

Field	Description
Descriptive Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203. The **Indexed** field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.

Field	Description
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284
Default Image Location	If desired, you can insert a default image, which might be the most common image or simply a reminder that an image needs to be inserted. To help find the image, click the **From File** button and navigate to image file. You can only insert an image file whose extension appears between the `<validext>` tags in the configdatadesign.xml file. For example: `<validext>gif,jpg,png,jpeg,jpe,doc,txt </validext>`
Cannot be blank	If you want to require the user completing this field to enter a response, click inside this check box.
Description	Enter the image's alt text. The Alt text appears when the user hovers the cursor over the image on the screen

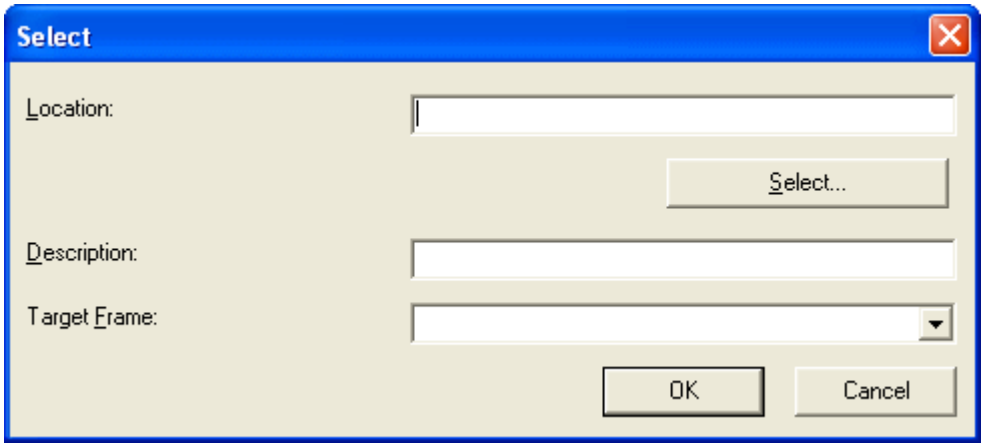
File Link Field

Use a File Link field to place an icon on the screen which the user in Data Entry mode can use to link to any file, such as a Microsoft Word document or a .gif image file. (You can also use an Image Only field to let the user insert an image. *See Also:* "Image Only Field" on page 274)

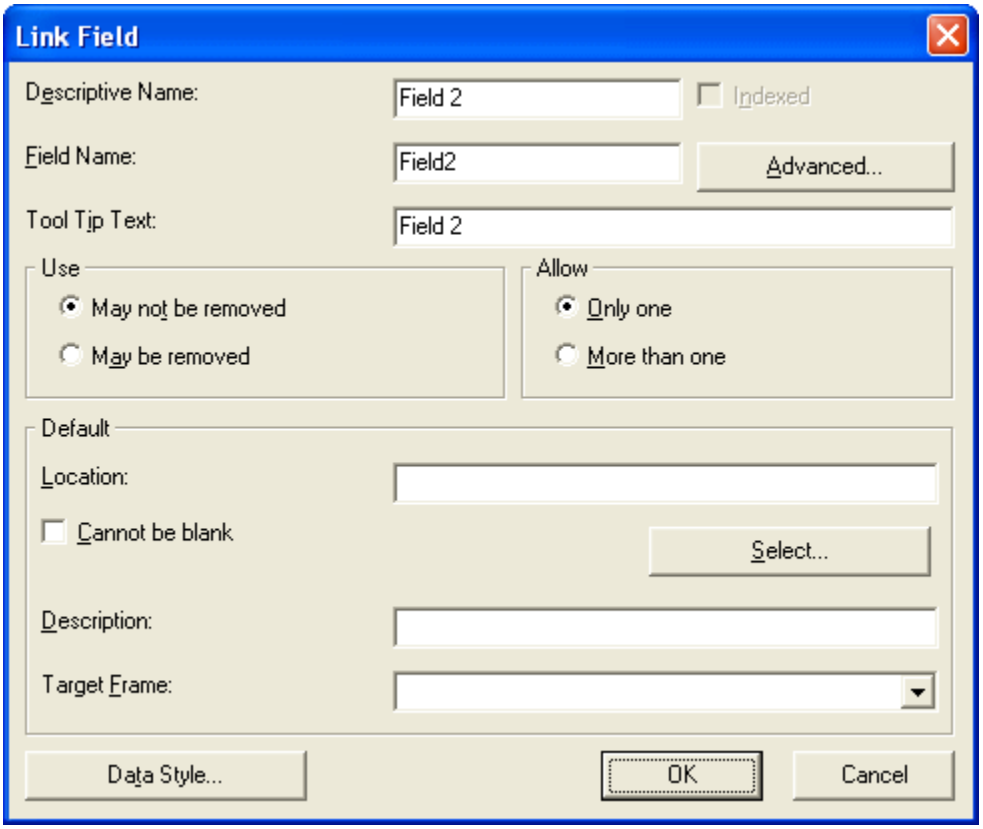
Using a File Link Field in Data Entry Mode

In Data Entry mode, the file link field's caption appears, followed by this icon: . When the user clicks the icon, this screen prompts the user to specify a file, a description, and a Target Frame.

NOTE The user can only insert a file whose extension is defined within the `<validext>` element of the configdataentry.xml file. Your system administrator can help you do this.



Dialog Box



Fields on the File Link Field Dialog

Field	Description
Descriptive Name	Enter the name of the field. Note that you cannot enter spaces nor most special characters (!@#$%^&*()+=<>,.:;'"{}[]|\`~) into this field. *See Also:* "The Name Field's Default Value" on page 230

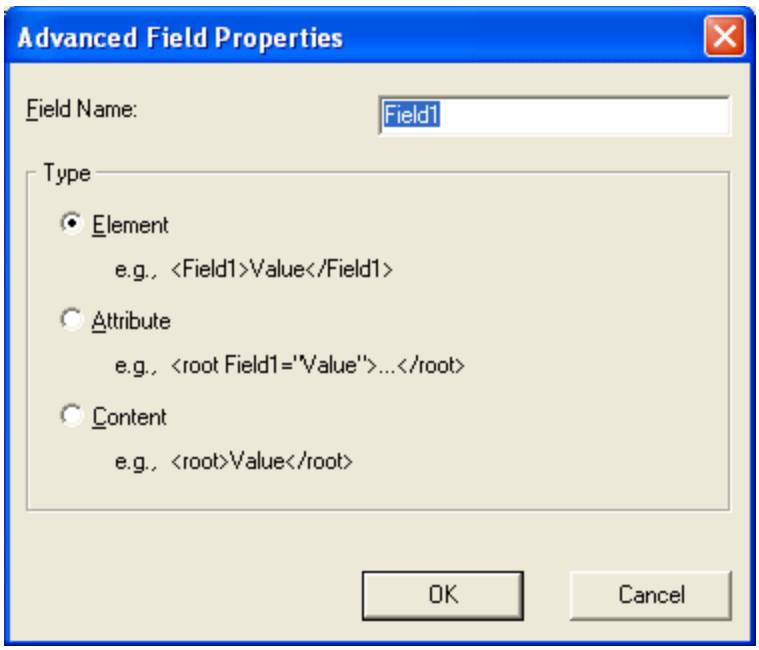
Field	Description
Indexed	Check if you want to index this field. For more information, see "XML Indexing" on page 203 The indexed field may or may not appear, depending on how your administrator has set up your system.
Field Name	Enter the field's element name. This defines the field in the XML.
Advanced	See "Advanced Button" on page 280
Tool Tip Text	Enter the text that appears when a user hovers the cursor over this field.
Use	See "The Use Field" on page 283
Allow	See "The Allow Field" on page 284
Default Location	If desired, you can insert a default link, which can be the most common link or simply an example. To help find the link, click the **Select** button and navigate to a file. You can only insert a file whose extension appears between the `<validext>` element of the configdatadesign.xml file. For example: `<validext>gif,jpg,png,jpeg,jpe,pdf,doc </validext>`
Cannot be blank	If you want to require the user completing this field to enter a response, click this check box.
Description	If desired, enter text that the user can click to access the linked file.
Target Frame	• New Window(_blank) - In a new browser window, on top of the current browser. • Same Window(_self) - In the same position within the browser window. The new window replaces the current one. • Parent Window(_parent) - If your page contains frames, in the frame that contains the frame with the hyperlink. • Browser Window(_top) - If your page contains frames, in the full display area, replacing the frames.

Field	Description
Data Style	See "The Data Style Field" on page 285

Fields that Appear on Several Dialogs

Advanced Button

The **Advanced** button opens a dialog that lets you control the XML that the field produces.



The dialog lets you generate XML microformats made up of standard XHTML tags and attributes that contain a specific structure and values. The types are described below.

WARNING! In order for Smart Form fields to searchable, they must be stored as elements *not* attributes. *See Also:* "Advanced Button" on page 280 If you are upgrading to version 7.5, inspect your Smart Forms and change field properties as needed so they are stored as elements not attributes.

Type	This field defines	Example
Element	A unique tag. The user's response to the field becomes its value.	`<Lastname>Rogers</Lastname>`
Attribute	An attribute of the containing field. The containing field is typically a Group Box. If you insert an **Attribute** field type, the Field Name field on the dialog box is grayed out. The field name and type can only be edited on the Advanced Field properties screen.	`<PtInformation Lastname="Rogers">` `</PtInformation>`
Content	The content of the containing field, typically a Group Box. Note that, in this case, field name is not used. As a result, the **Field Name** field is is grayed out. Since most fields define their own content, this option is typically used to define a value to a Group Box that contains other fields defined as attributes. **IMPORTANT!** Only one Content type field is valid within a containing field. If you insert an **Content** field type, the Field Name field on the dialog box is grayed out. The field name and type can only be edited on the Advanced Field properties screen.	`<PtInformation>Rogers</` `PtInformation>`
Value (Only appears if field type is Image Only or File Link)	Whether the value is an element or plain text. **Value is an element** renders the field as • `<a href=”url” title=”text” target=”frame”>text</a>` for a file link • `<img src=”url” alt=”text” />` for an image **Value is plain text** renders the field as just the url.	

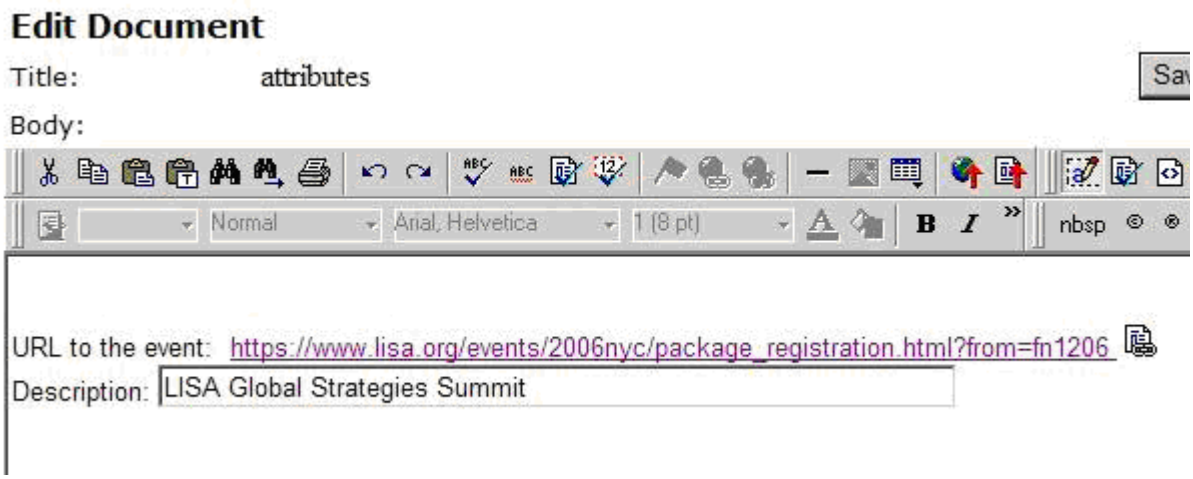
Sample Microformat

For example, the microformat of an event looks like this.

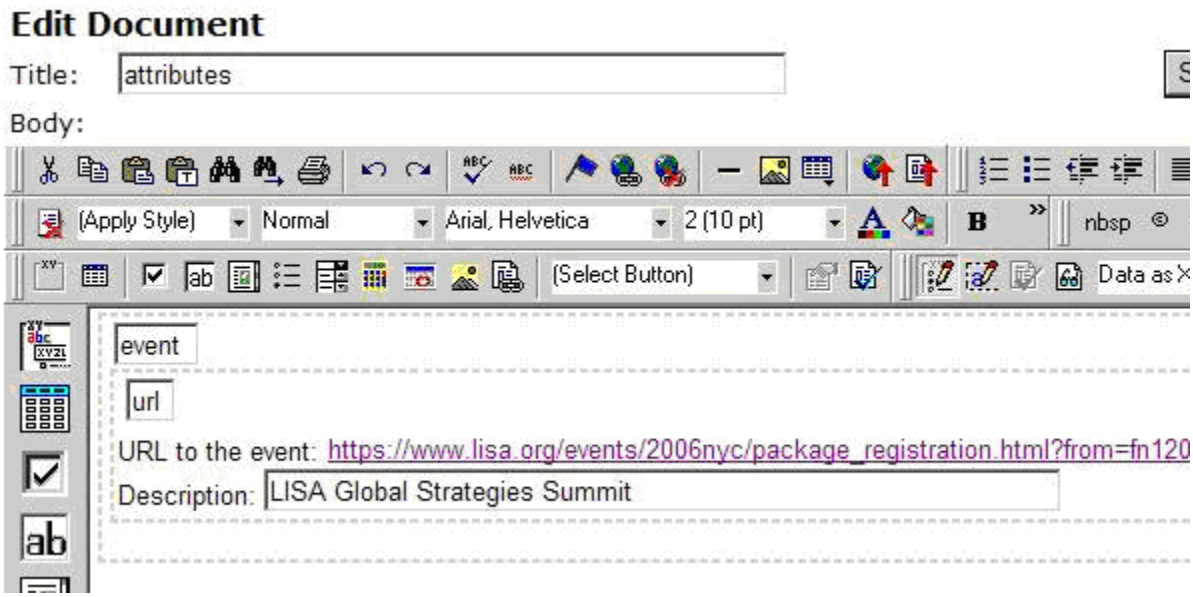
```
<span class="event">
```

```
<a class= "url"href="https://www.lisa.org/events/2006nyc/package_registration.html?from=fn1206
">LISA Global Strategies Summit</a>
</span>
```

The Data Entry view looks like this.

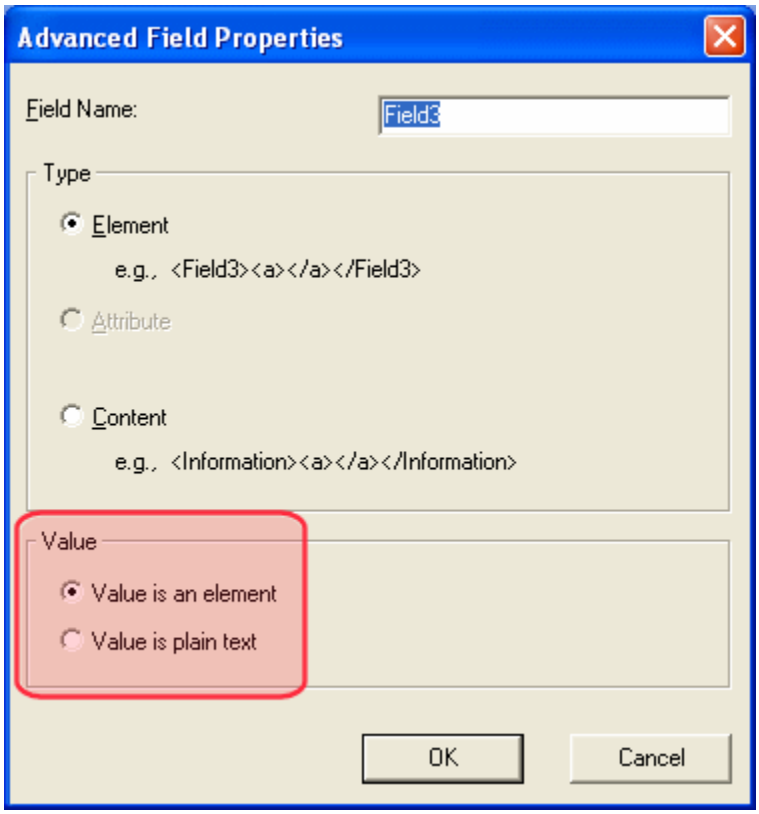


The Data Design view looks like this.



Additional Notes about Advanced Field Properties

- If the element is a group box or table, its type must be **Element** because it surrounds other elements.
- If the element is a Rich Area field, its type must be **Element** or **Content**.
- If the element is a link to an external file (either image or link filed), the Advanced Field Properties dialog has an additional field, **Value**. For more information, see "Value" on page 281.

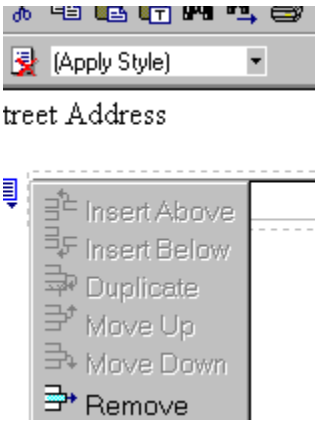


The Use Field

Click **May not be removed** if this field must be included on the screen. Otherwise, click **May be removed**.

If you check **May be removed**, when this field appears on a data entry screen, an icon ( ) appears to the left of the field.

If the user clicks the icon, a dropdown menu provides an option to remove the field, as shown below.



If the user removes the field, add *field display name* replaces the field on the data entry screen to indicate that the field was removed and can be added if necessary.

For example, if the field's display name is street address, and the user removes the field, add Street Address appears in place of the field.

NOTE The menu icon ( ) can also indicate that the user can add instances of a field (see the Allow field, below). So, if a field is required, the icon could appear but omit a **Remove** option.

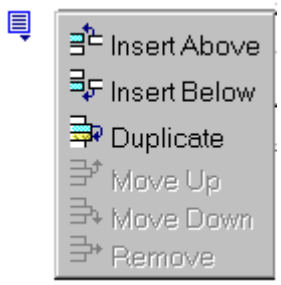
The Allow Field

Check **more than one** if you want to let the user entering data add instances of this field. Otherwise, check **only one**.

WARNING! Do not insert a calendar field into a Smart Form that allows multiple entries (using the **Allow more than One** option on the dialog). If you do, you cannot search the Smart Form using that field.

For example, if a screen is collecting names and addresses and you want to let the user enter several of them, check **more than one**.

If you check **more than one**, when this field appears in Data Entry mode, appears to the left of the field, as shown below.

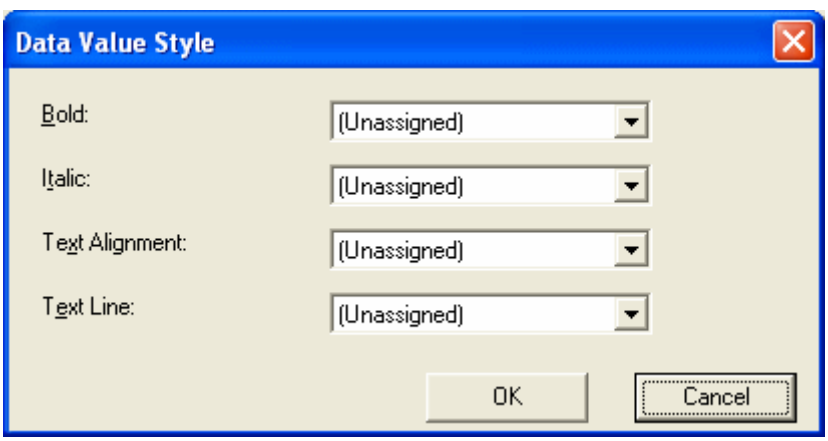


If the user entering data clicks , a menu appears (shown above), which lets the user add instances of the field to the screen.

NOTE The menu icon ( ) can also indicate that the user can remove a field (see the Use field, above). So, even if a field allows only one instance, the icon could appear but the menu would only display **Remove**.

The Data Style Field

Click the Data Style button to apply formatting to the field that accepts user input. When you do, the following dialog appears.

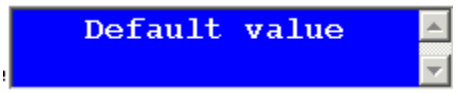


Use the dialog to assign the following formatting attributes to a user response field.

- Font style and size
- Bold and italic
- Text alignment (especially helpful for formatting dollar amounts in a plain text field)
- Underline or strikethrough
- Font color and/or background color

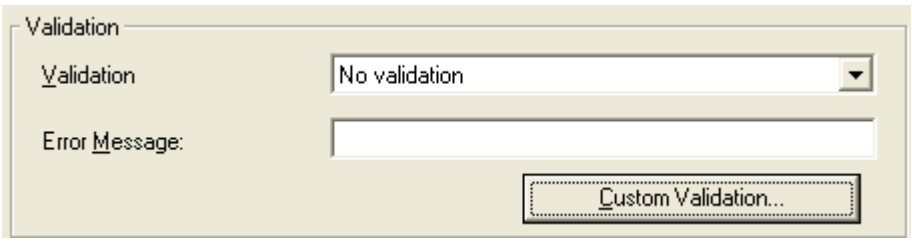
NOTE The configuration data controls a command's appearance on the toolbar and on the Data Style dialog. For example, if `<button command="cmdfontname" />` is removed from configdatadesign.xml, it disappears from the toolbar and the Data Style dialog.

Below is an example of a response field whose font, size, alignment, background, and foreground colors were modified via this dialog.



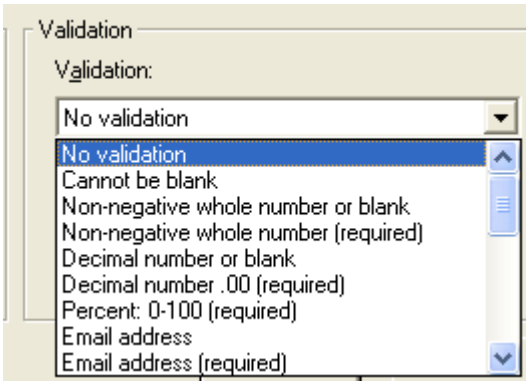
Custom Validation

The Plain Text and Calculation field dialogs feature a validation section (illustrated below).



Adding Standard Validation Options

By default, the Data Designer provides several standard validation options. You can see them by clicking the down arrow to the right of the **Validation** dropdown.



If you will frequently use a validation format that does not appear on the list, the following Ektron KB article provides instructions for creating additional validation options.

http://dev.ektron.com/kb_article.aspx?id=7420

Creating Custom Validation Criteria

If the standard validation options do not provide the flexibility you need, use the custom validation feature to ensure the following about the user's input.

- The data type - the default types are
  - text
  - URL
  - whole number
  - decimal number
  - floating point number (Floating point includes scientific notation, so is appropriate for scientific numbers. Decimals usually suffice for business numbers.)

NOTE Your system administrator may customize the choices.

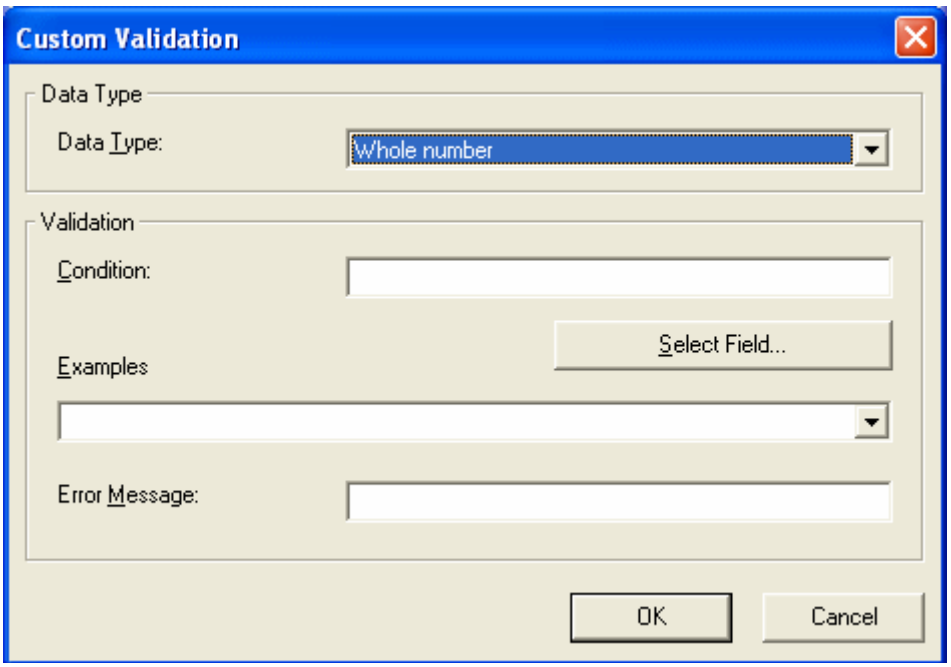
- The field value has one of the following relationships with another field, a number, or an expression - the default expressions are
  - between two values (either another field or a number that you specify)

- less than
- equal to
- not equal to
- maximum length (usually for text responses)

NOTE Your system administrator may customize the choices.

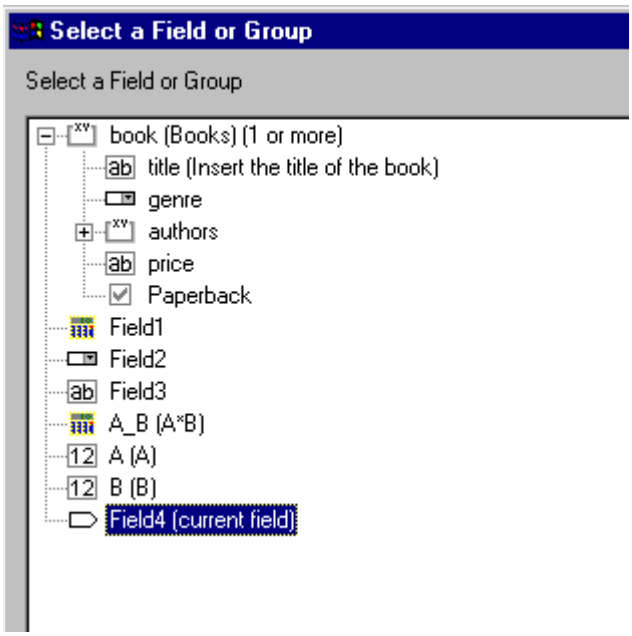
If the user's response fails to meet the criteria, you can compose an error message that appears when that happens. Your system administrator determines if a user can save the invalid data.

When the **Custom Validation** button is clicked, the Custom Validation dialog appears.



- The **Data Type** field is the value's basic type, for example, text number or URL.
- The **Condition** field displays the validation logic.
- The **Examples** drop-down list shows validation expressions that the data design creator can apply to the field.
- Any **Error Message** displays in Data Entry mode when the user inserts an invalid value.

When the **Select Field** button is clicked, the Select a Field or Group dialog appears.

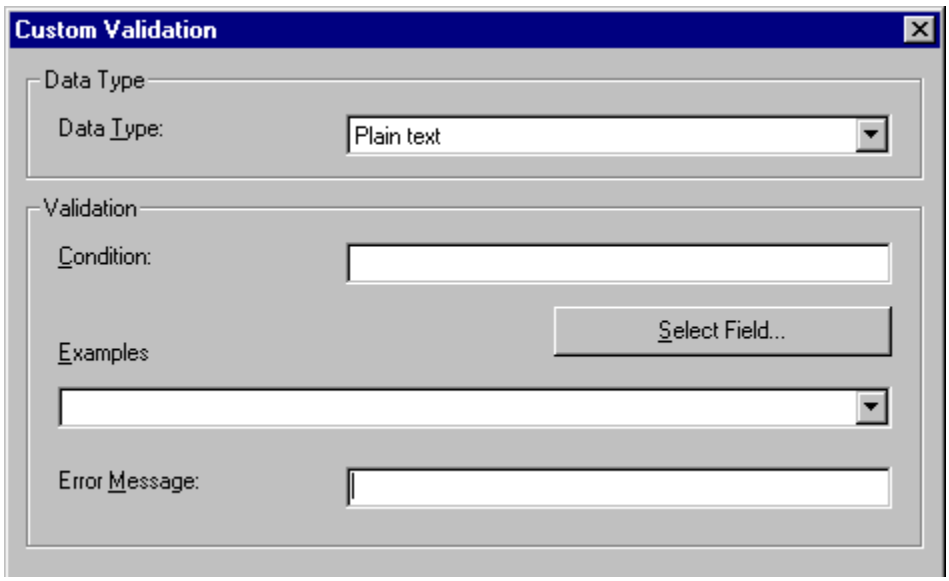


This dialog displays fields that can be inserted into the **Condition** field. Some field types, like the RichArea field, are not listed. *See Also:* "Referencing Other Calculated Fields" on page 263

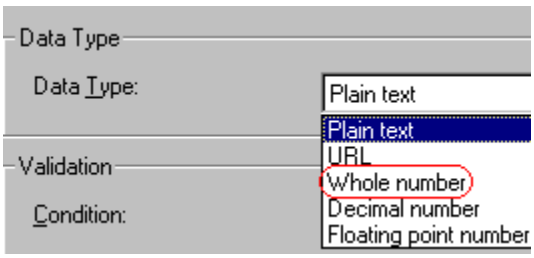
Example of Creating Custom Validation

As an example of custom validation, assume that a field collects telephone numbers, and you want to make sure the user enters 10 digits. To accomplish this, follow these steps.

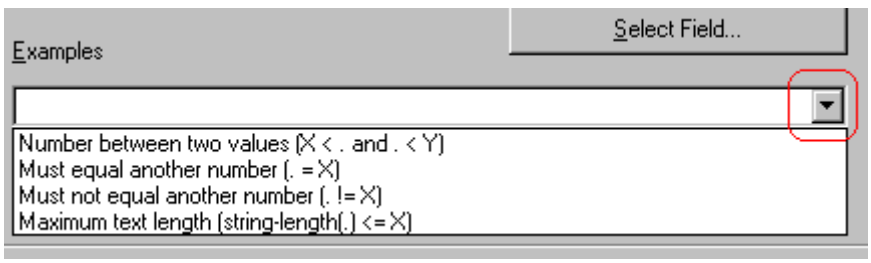
1. Click the Plain Text Field dialog and complete the screen.
2. In the validation section, click **Custom Validation**. The Custom validation screen appears.



3. In the **Data Type** field, select **Whole Number** from the drop down list. This ensures that the user can only enter digits.

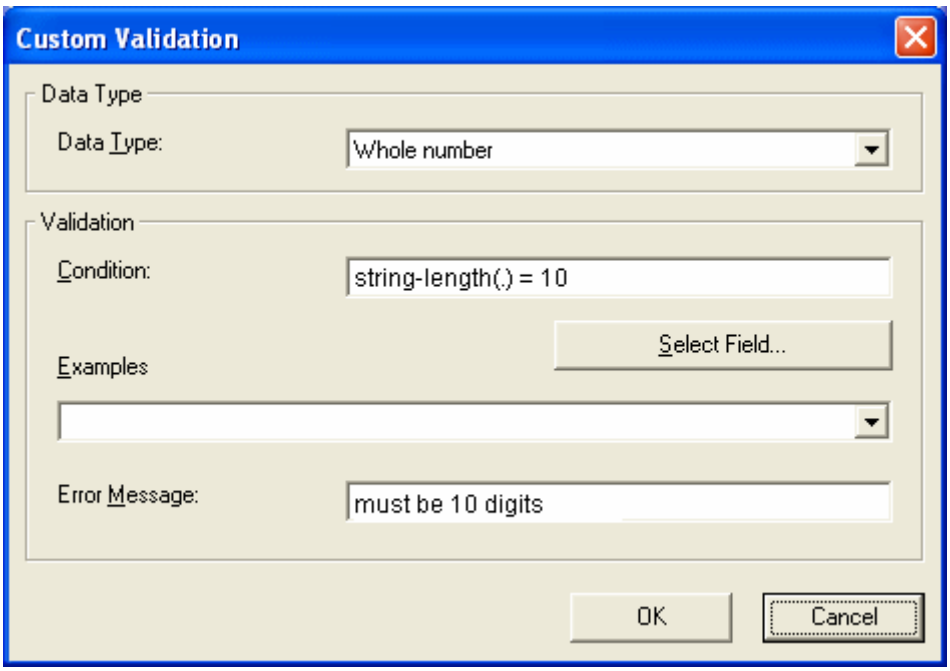


4. Click the down arrow to the right of the **Examples** field to see sample logic.


Select Field...
Examples
Number between two values (X < . and . < Y)
Must equal another number (. = X)
Must not equal another number (. != X)
Maximum text length (string-length(.) <= X)

5. Click **Maximum text length...** . This option lets you specify the length of the user's response.
6. `string-length(.) <= {X}` appears in the **Condition** field.

7. Since you want the user's input to equal 10, remove the less than sign (<) from the calculation. Now it looks like this: `string-length(.) = {X}`.
8. Replace the `{X}` with 10. Now, it looks like this: `string-length(.) = 10`.
9. Move the cursor to the **Error Message** field and compose a relevant error message. For example: `must be 10 digits`.
10. Your screen should look like this.



11. Press **OK** and return to the **Plain Text** field dialog.
12. Press **OK** to save that dialog and test the validation on the phone number field. To do this, switch to Data Entry mode and enter more or fewer than 10 digits, as well as non-digit characters to verify that validation works as expected.

Managing HTML Forms

Ektron CMS400.NET's HTML Forms feature lets users create and maintain HTML forms to collect information from visitors to your Web site.

This section only describes the following technical topics relating to forms. For more information about using HTML forms, see the **Ektron CMS400.NET** User Manual.

- ”Form Permissions” on page 292
- ”Forms Must Use Template with FormBlock Server Control” on page 293
- ”Preparing the Server to Send email” on page 294
- ”Implementing a Form on a Web Page” on page 295
- ”Sending Data as XML” on page 296
- ”Redirecting Submitted Form Data” on page 303

Form Permissions

Folder Permissions

By default, form permissions are inherited from a form's folder. To customize permissions for any folder that contains forms, access the corresponding folder under Content and assign permission as described in ”Setting Permissions for a Content Folder” on page 780.

Administrator Permissions

Similar to content, users in the administrator user group have full control over form features. You *must* be a member of the administrator group to:

- Add a form
- Edit a form
- Delete a form
- Assign content to a form

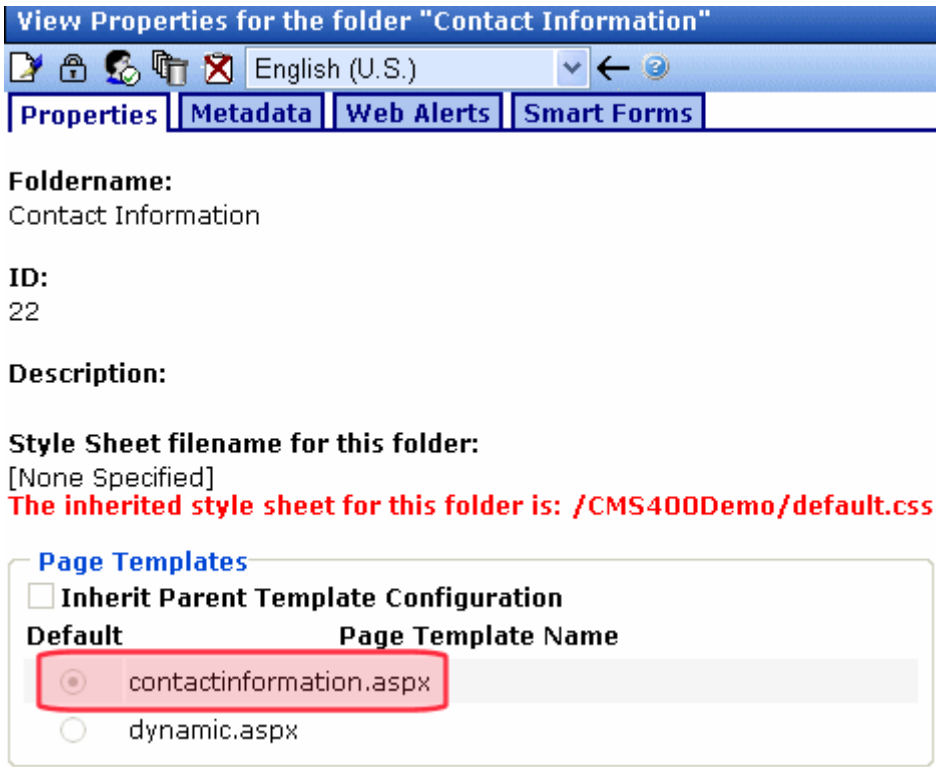
You may also perform all actions on a form's content.

User Permissions

Users who are not members of the administrator user group can add, edit, delete, and restore form content if granted these permissions for the content folder or item.

Forms Must Use Template with FormBlock Server Control

HTML forms can only be created in a folder whose template uses a FormBlock or Poll server control. In the Intranet sample site supplied with **Ektron CMS400.NET**, the Contact Information folder uses such a template, contactinformation.aspx (illustrated below).



You can modify this template as needed or create your own form template and assign it to any folder via its Folder Properties screen.

Since, by default, folders inherit properties from their parent folder, any new folders created under a parent folder use the correct template. Of course, you can break inheritance and assign a custom template for any folder.

Preparing the Server to Send email

Since email generated by forms is created on and sent from the server that hosts Ektron CMS400.NET, the server must be enabled to handle those responsibilities. To configure your Web server to send email, refer to Configuring email Notifications in the Ektron CMS400.NET Setup Manual.

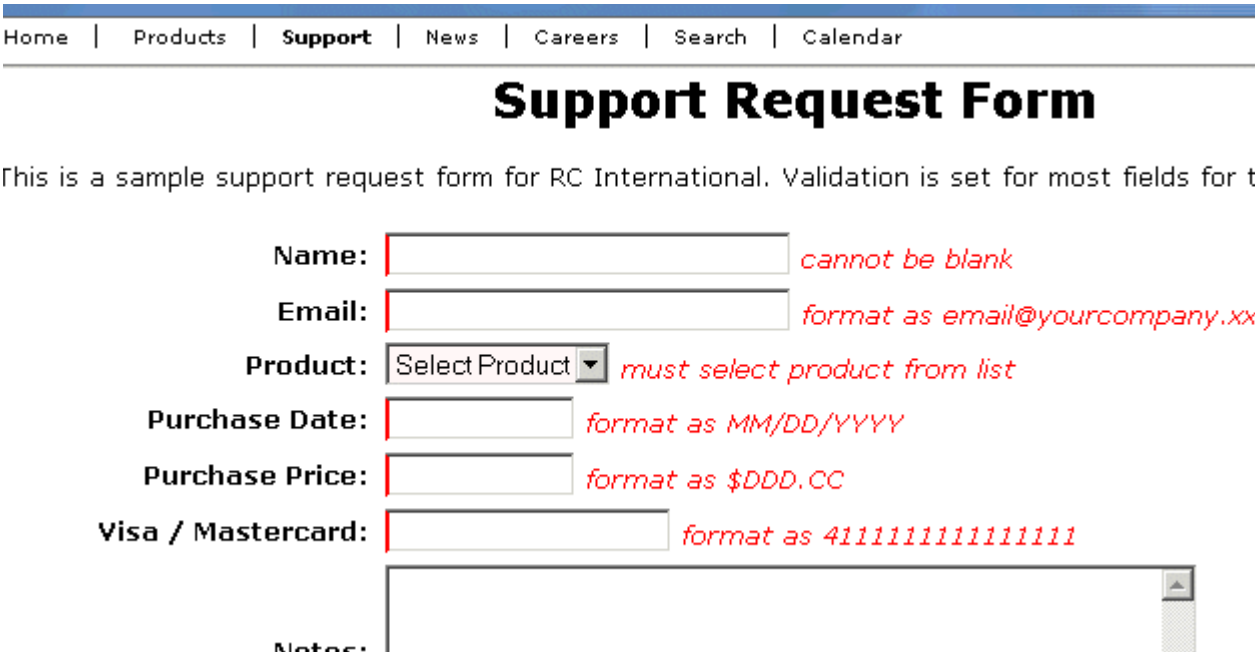
Implementing a Form on a Web Page

After you create a form, the next step is to implement it on a Web Page. To do that, follow these steps.

NOTE The use of server controls or functions to manage templates is documented in the Ektron CMS400.NET Developer's Manual.

1. Open the Web form template on which you want the Form content to appear. (This example uses support.aspx.)
2. Place the FormBlock or Poll server control in the body of the template. Below is an example of what the form might look like.

IMPORTANT! Ektron recommends using the Poll server control when displaying a form that is being used as a Poll or a Survey. For more information, see the Ektron CMS400.NET Developer Manual section "Poll Server Control."


Home | Products | Support | News | Careers | Search | Calendar
Support Request Form
This is a sample support request form for RC International. Validation is set for most fields for t
Name:
cannot be blank
Email:
format as email@yourcompany.xx
Product:
Select Product
must select product from list
Purchase Date:
format as MM/DD/YYYY
Purchase Price:
format as $DDD.CC
Visa / Mastercard:
format as 4111111111111111

3. Save and close the new Web form.
4. To test your form, navigate to your Web site then to the new page.
5. Complete the form.
6. Click the Submit Form button.

7. The screen is refreshed and displays the post back message that you created.

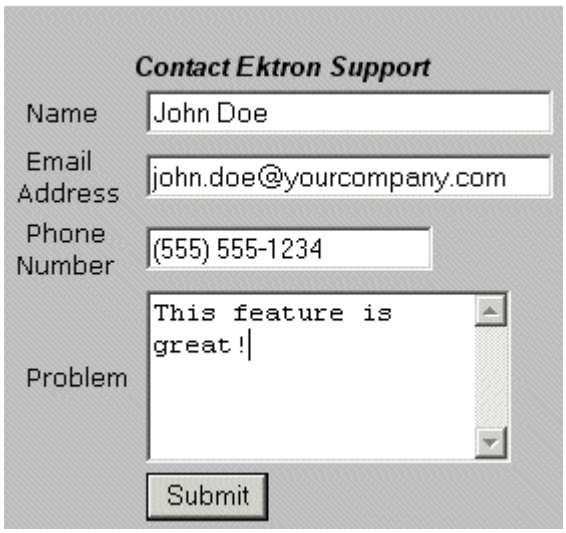
Sending Data as XML

While creating a form that generates email, you can specify that the email be sent as XML data or plain text.

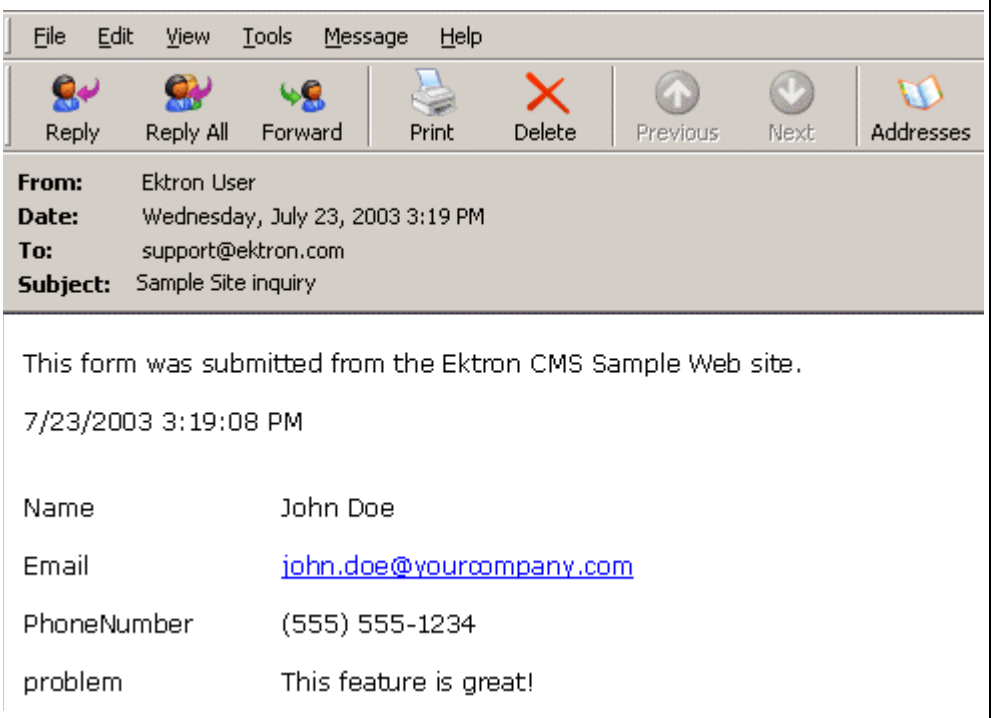
XML has the following advantages over plain text.

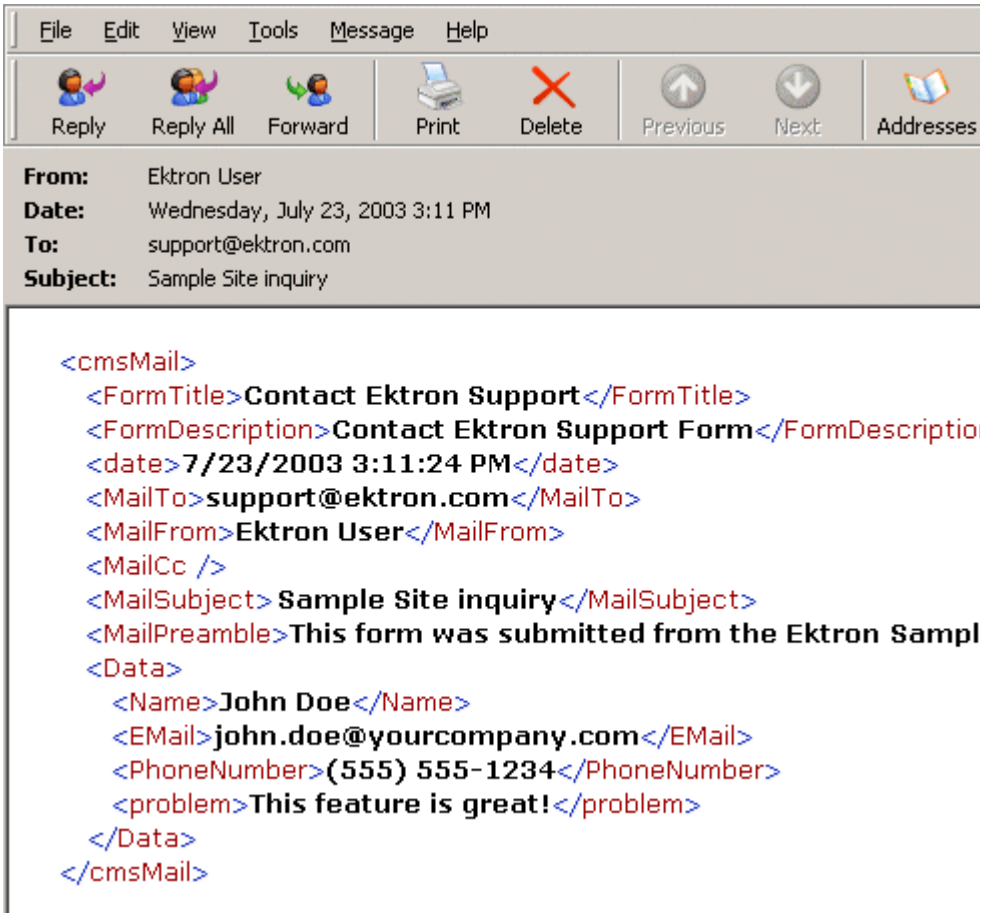
- Because XML data is structured, you can easily parse the content to store and retrieve important information.
- If you download the form data to an Excel spreadsheet, the XML tags become the spreadsheet's column headers. *See Also:* **Ektron CMS400.NET** User Manual Section "Working with HTML Forms" >"Viewing Form Reports" > "Exporting Form Reports".

This section contrasts XML and plain text email using the form displayed below as the example. Here is an example of a form before it is submitted.



The following table displays the resulting email, depending on the method used.

Form sent as	Generated email
Plain Text	

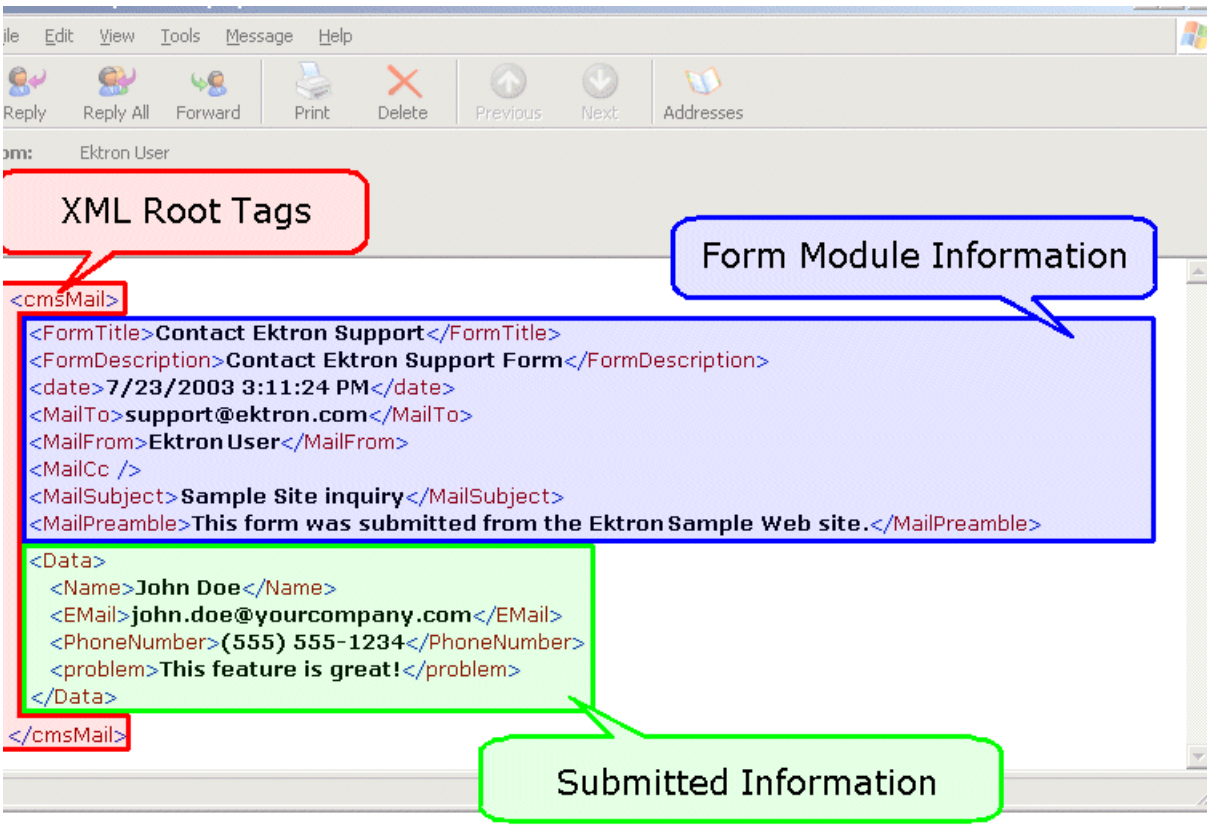
Form sent as	Generated email
XML	

XML email Structure

A form's XML structure consists of two groups of XML tags:

- Form and mail elements
- Data elements

The following image illustrates the sections of XML email structure.



The following explains the sections of the XML email.

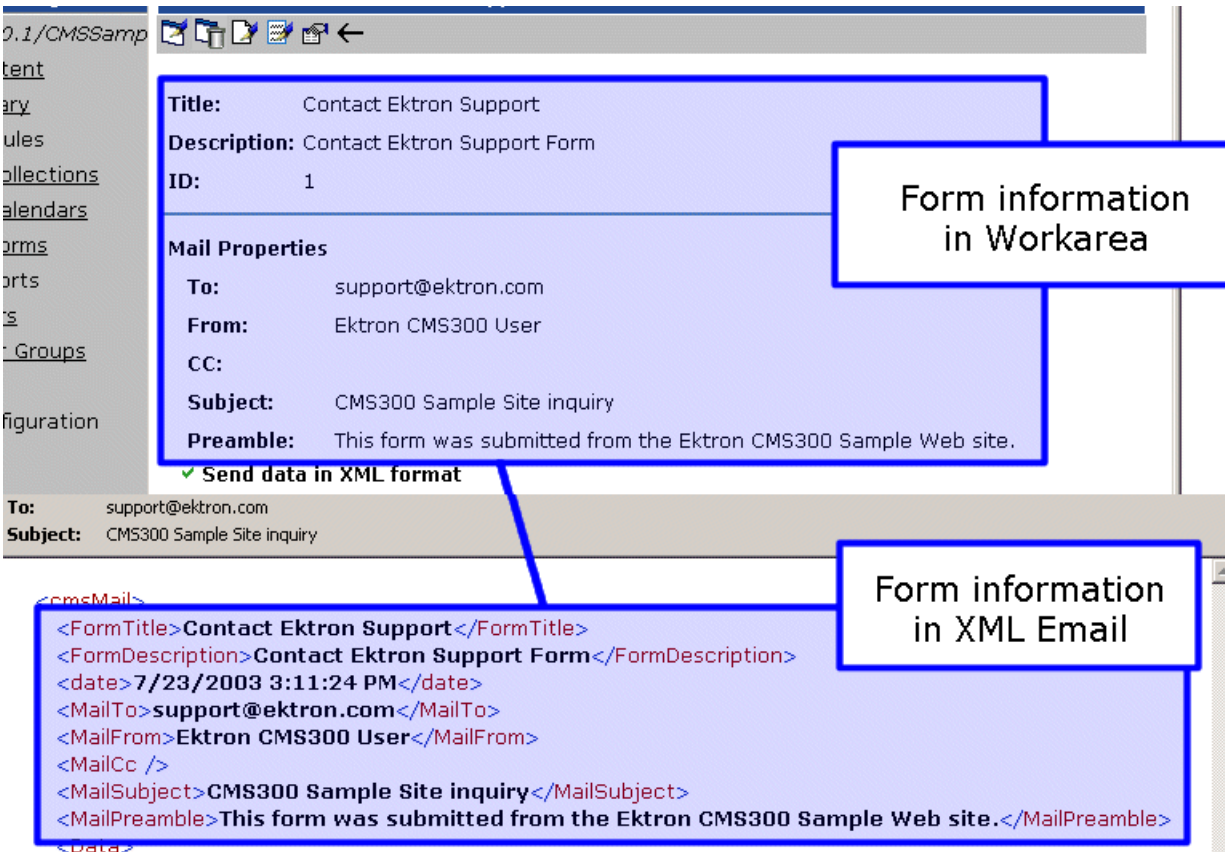
Root Tag

The XML email is wrapped in `<cmsMail>` root tags.

Form and Mail Tags

The form and mail tags display information about the form that was generated from the form information.

This illustration compares the information defined for the form with the information in the XML email.



The following table explains each XML tag in the form and mail sections of the email.

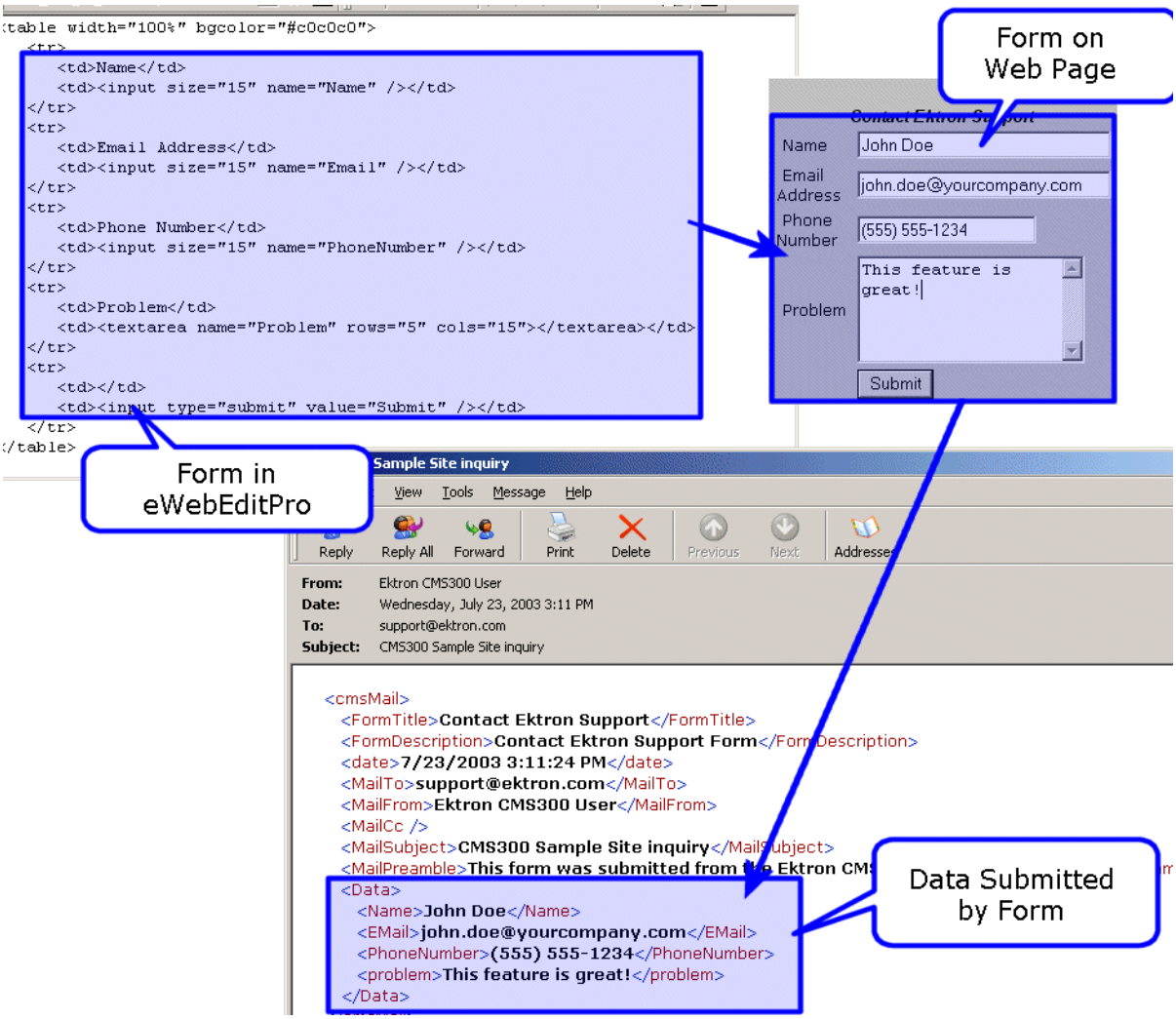
XML Tag	Description
<FormTitle>	Title given to the form that was submitted.
<FormDescription>	Description given to the form that was submitted.
<date>	Date and time the form was submitted.
<MailTo>	To email address(es) defined in the form.
<MailFrom>	From email address(es) defined in the form.
<MailCc>	CC address(es) defined in the form.

XML Tag	Description
<MailSubject>	Subject for the generated email defined in the form.
<MailPreamble>	Preamble for the generated email defined in the form.

Data Tags

The XML email's data tags wrap the information entered by the form's submitter. Each form element in the content becomes an XML tag.

The following image illustrates how a form is edited in the editor, displayed on a Web page, and then converted to XML for the email.



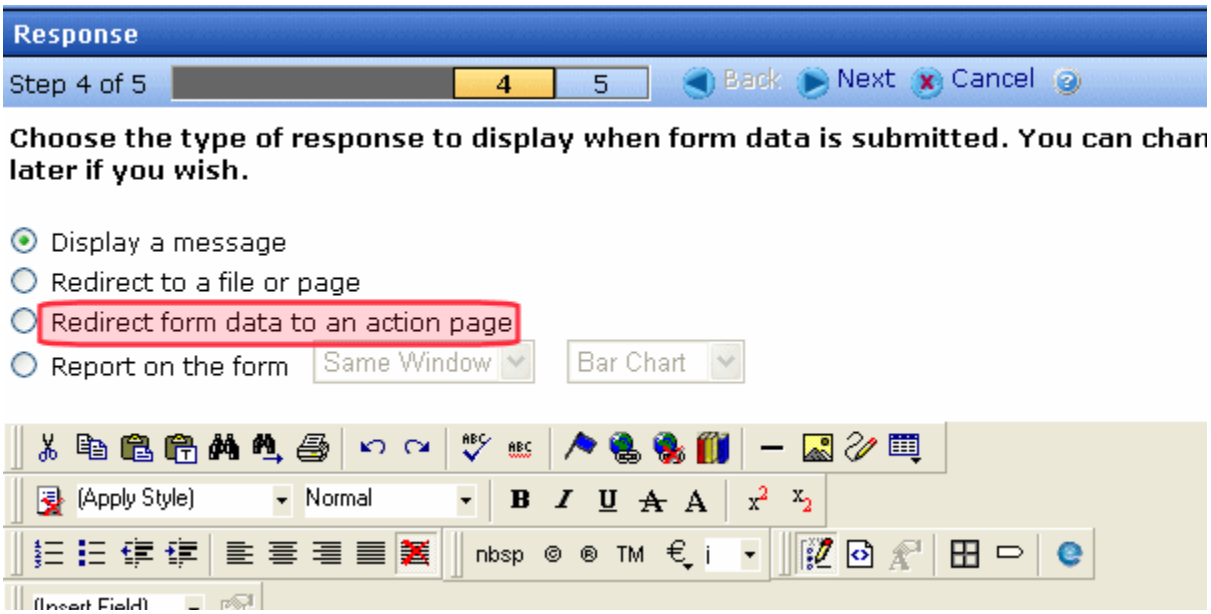
As shown in the graphic, the content is comprised of four form elements that are converted to XML tags:

- Name
- Email
- PhoneNumber
- Problem

Redirecting Submitted Form Data

This section explains how to redirect submitted form data to an action page. Because the data is redirected via server transfer, you can easily customize the handling of a multi-page form.

Users can select this option when creating or editing a form response, as illustrated below.



Instructions for how a user chooses a hyperlink to an action page are in the **Ektron CMS400.NET** User Manual section “Working with HTML Forms” > “Creating a New Form” > “Redirecting to an Action Page and Forwarding Form Data”.

WARNING! If your form will redirect the user to an action page, it must be implemented using a FormBlock server control. You cannot use a Poll server control when redirecting to an action page.

NOTE If a form’s specifications indicate that its data is saved to a database, the data is saved before being forwarded to an action page.

The following section explains how an administrator sets up a hyperlink to the action page in preparation for a user’s selection.

Setting Up the Action Page

1. Create the action page. It must
   - load and use the form variables
   - have an .aspx extension
   - reside in the same web application as your Web site

IMPORTANT! If your site is using URL Aliasing, the action page's header must include the following: `EnableEventValidation="false" EnableViewStateMac="false"`

2. Place the action page in your Web site's root folder.
3. Set up a library hyperlink to the .aspx page. Here's how to do that:
   - In **Ektron CMS400.NET**, go to the Library.
   - Select **Hyperlinks** from the file type dropdown.
   - Click the Add button ( ).
   - In the **URL Link** field, enter the path relative to the Web root to the .aspx file you created in Steps 1 and 2. For example:

`http://localhost/siteroot/ServerVariables.aspx`

   - Give the hyperlink a title and save it.
4. Inform your users of the hyperlink. They will select it when selecting the form response.

Managing Assets

This section explains the administration of the Document Management functionality in **Ektron CMS400.NET**. It includes the following sections:

- ”Document Management Configuration” on page 305
- ”Checking Document Management Permissions” on page 309
- ”Managing Multimedia Assets” on page 312
- ”PDF Generation” on page 319
- ”Adding Assets Automatically” on page 323
- ”Merging Indexing Service Catalogs” on page 330
- ”Troubleshooting” on page 337

Document Management Configuration

This section explains configuring the Document Management feature. By changing these settings, you can:

- update Document Management server settings
- change which file types are allowed on the Document Management server
- set the View Type

There are two ways you can configure a Document Management server:

- the Asset Server Setup screen in the Workarea. *See Also:* ”Updating Asset Configuration Settings” on page 306
- the AssetManagement.Config file. *See Also:* ”The AssetManagement.Config File” on page 307

In either case, you are editing the AssetManagement.Config file. While the Workarea screen provides a simple way to update this information, some tags can only be updated in the

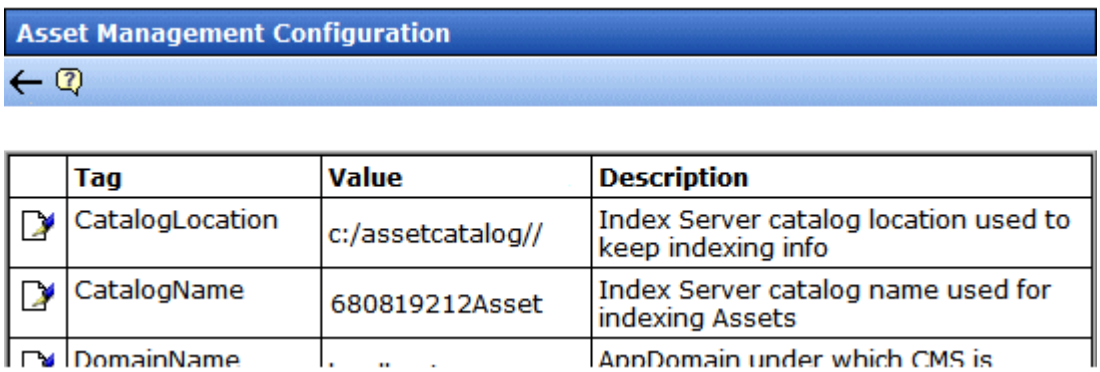
AssetManagement.Config file. The table in "The AssetManagement.Config File" on page 307 indicates which tags can be edited in the Workarea.

Updating Asset Configuration Settings

You can update some AssetManagement.Config tags from the Ektron CMS400.NET Workarea. To do that, follow these steps.

NOTE Only members of the Administrator User Group can view, add, or edit the Asset Server Setup.

1. In the Workarea, go to **Settings > Configuration > Asset Server Setup**.
2. The **Asset Management Configuration** screen appears.



3. Click the Edit button ( ) for the tag you want to edit.
4. The **Value** field for that tag changes to a text box.
5. Change the information in the text box.
6. Click the Save button ( ).

For more information on each tag, see "The AssetManagement.Config File" on page 307.

The AssetManagement.Config File

The following table describes the AssetManagement.Config file's tags.

Element	Description	Editable within Workarea?
CatalogLocation=	The folder location of the Asset Catalog. This location is used when setting up the index service. For example: "`C:\assetcatalog\`".	✓
CatalogName=	The name of the Asset Catalog. This name is used when setting up the index service.	✓
DomainName=	Can be Domain Name, IP Address or Machine Name. An example is: localhost. This is the address a Web client system uses to open managed documents through HTTP.	✓
FileTypes=	Files types that users are allowed to upload to Document Management. For more information, see "FileTypes" on page 327. The default file types installed are *.doc,*.xls,*.ppt,*.pdf,*.gif,*.jpg,*.jpeg,*.txt,*.log,*.vsd,*.dot,*.zip,*.swf,*.wma,*.wav,*.avi, *.mp3, *.rm, *.wmv, *.ra, *.mov, *.odt, *.odf, *.odp, *.odg, *.ods, *.odb	✓
LoadBalanced=	Enables Load Balancing for assets. Set to "1" to enable. *See Also:* "Load Balancing Assets" on page 1070	✓
Password=	The password for the user created during the install. This password is encrypted during the install. If you are changing the user and need to encrypt a new password, use the `dms400encryptpassword.exe` encryption tool located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities\DMS`.	✓
ServerName=	The name of the server that hosts **Ektron CMS400.NET**.	
StorageLocation=	The folder location where published assets are stored. For example: "`C:\assetslibrary`".	✓
UserName=	The user created during the install.	✓

Element	Description	Editable within Workarea?
WebShareDir=	The folder where temporary data files that are waiting to be checked in, saved, or published are stored. For example: `"dmdata"`.	✓

Allowing File Types

Administrators control which file types are allowed in the Document Management functionality by editing the AssetManagement.config file. Reasons for limiting the file types include:

- Security - For example, you do not want users to load .exe files to your Document Management server
- Ease of Management - For example, you want your Document Management server to store .doc files only

The `<FileTypes>` tag in the AssetManagement.config file contain the file types users can upload. The default file types are:
`*.doc,*.xls,*.ppt,*.pdf,*.gif,*.jpg,*.jpeg,*.txt,*.log,*.vsd,*.dot, *.zip,*.swf,*.wma,*.wav,*.avi, *.mp3, *.rm, *.wmv, *.ra, *.mov, *.odt, *.odf, *.odp, *.odg, *.ods, *.png,*.docx,*.xlsx,*.pptx, *.vsdx, *.htm, *.html *.js,*.wmf,*.css,*.xml`.

Adding or Removing a File Type

To add or remove a file type from the list, follow these steps.

1. Edit the **Workarea > Settings > Configuration > Asset Server Setup > Update Asset Configuration Settings** screen.

   Or

1. Open the `AssetManagement.config` file. The default location is `(webroot)/(site root)`.
2. Find the `FileTypes=""` element. All file types must appear between the quotes. For example, `FileTypes="*.doc,*.xls"`.

NOTE Use a comma to separate file types. Also, file types must be formatted as wildcard.extension. For example, adding an .mp3 file type to the list after *.zip looks like this: `*.zip,*.mp3`

3. Add or remove any file type.
4. Save and close the `AssetManagement.config` file.

Checking Document Management Permissions

If you are having any problems with permissions, use this section to verify that your user and folder settings are assigned properly.

See Also:

- ”User Permissions” on page 309
- ”Folders Used by Document Management” on page 311

User Permissions

When the Document Management functionality is installed, permissions are granted to several users for the following folders:

- *webroot**site root*\AssetManagement\dmdata
- *webroot**site root*\Assets
- *root*\assetlibrary

The assigned permissions vary depending on your server’s operating system.

The following table lists users and their permissions. Scan down the column of your server’s operating system to determine which users and permissions should be enabled for the folders listed above.

You can use this information to help troubleshoot potential permission problems.

User	Needs these permissions	Windows 2000 Pro or XP Pro	Windows 2003 Server	Windows 2003 Enterprise Edition
IIS_WPG User	See "Advanced Permissions" on page 310		✓	✓
IUSR_ (The IUSR_ account is required only if `Impersonate` is set to `True` in web.config, and its username and password attributes are not specified. If `impersonate` is set to `false` (default setting), the IUSR_ account may be harmlessly removed from the folders listed.)	See "Advanced Permissions" on page 310	✓	✓	
IUSR_Group	See "Advanced Permissions" on page 310			✓
ASP.NET User	See "Advanced Permissions" on page 310	✓		
User Defined (The User Defined user account is required only if `Impersonate` is set to `True` in web.config, and its username and password attributes are specified.)	See "Advanced Permissions" on page 310	✓	✓	✓

Advanced Permissions

The following are extended permissions for use with the Document Management functionality.

- Traverse Folder / Execute File
- List Folder / Read Data

- Read Attributes
- Read Extended Attributes
- Create Files / Write Data
- Create Folders / Append Data
- Write Attributes
- Write Extended Attributes
- Delete Subfolder and Files
- Read Permissions

Folders Used by Document Management

Folder	Set by	Description
assetLibrary	User	Defined by user during installation. The path to this folder can be viewed and changed in the Workarea under **Settings > Configuration > Asset Server Setup > Storage Location**. *See Also:* "The assetLibrary Folder" on page 311
dmdata	**Ektron CMS400.NET**	Defined during **Ektron CMS400.NET** installation. Located in the AssetManagement folder. Has settings for both the File System and IIS.
assets	**Ektron CMS400.NET**	Defined during **Ektron CMS400.NET** installation. Located in site root folder.

The assetLibrary Folder

The Asset Library folder contains file assets uploaded to and managed by DMS. You can view and update the path to this folder in the Workarea under **Settings > Configuration >Asset Server Setup > Storage Location**.

Managing Multimedia Assets

Multimedia files contain audio, video, or both. File types include .wav, .mpeg., .swf, .avi, and .wma.

Because of their unique characteristics, these files warrant special treatment within **Ektron CMS400.NET**. This section explains how multimedia files are handled through the following subtopics.

- ”Supported Multimedia Players” on page 312
- ”Multimedia File Types” on page 313
- ”Working with Multimedia Files in Ektron CMS400.NET” on page 314

Supported Multimedia Players

Ektron CMS400.NET supports the following media players.

- WindowsMedia®
- Quicktime®
- Realplayer®
- Flash®

This means that **Ektron CMS400.NET** only supports multimedia files that run on one of these players. If you import a multimedia file that cannot play on any supported player, it is treated like any other asset but cannot be played within **Ektron CMS400.NET**.

Downloading Media Players

If a **Ektron CMS400.NET** user within the Workarea, or a site visitor, tries to play a file and no supporting media player exists on the user’s computer, the user is prompted to download and install the player.

If the file uses the *Quicktime* or *Flash* media player, the web.config file contains information that prompts the user to immediately download and install the player.

If the file uses the *Realplayer* or *WindowsMedia* media player, the user must go to the host Web site and download them.

Multimedia File Types

Every multimedia file type has a corresponding MIME type. For example, an mp3 file's MIME Type is audio/mpeg.

All supported MIME types are defined within the `mediasettings` element of the web.config file. That section of the web.config file is reproduced below.

```
<add key="application/x-shockwave-flash" value="Flash" />
<add key="audio/x-wav" value="WindowsMedia, Quicktime, Realplayer" />
<add key="audio/x-wav-default" value="WindowsMedia" />
<add key="audio/x-pn-realaudio" value="WindowsMedia, Quicktime, Realplayer" />
<add key="video/x-avi"  value="WindowsMedia, Quicktime, Realplayer" />
<add key="video/x-avi-default" value="Quicktime" />
<add key="video/x-msvideo" value="WindowsMedia, Quicktime"/>
<add key="video/x-msvideo-default" value="WindowsMedia"/>
<add key="audio/x-ms-wma" value="WindowsMedia"/>
<add key="audio/mpeg" value="WindowsMedia,Quicktime"/>
<add key="video/x-realvideo" value="Realplayer"/>
<add key="video/x-ms-wmv" value="WindowsMedia"/>
<add key="audio/x-realaudio" value="Realplayer"/>
<add key="video/quicktime" value="Quicktime"/>
```

NOTE A good reference of file and corresponding MIME types is http://www.w3schools.com/media/media_mimeref.asp.

To determine if a multimedia file type is supported, go to the Web site listed above to find its MIME type. Then, go to the web.config file section show above to see if the MIME type exists and, if so, the supported media players.

Adding Players for a MIME Type

You can add to the list of supported media players for any MIME Type. To do so, open the web.config file, find the MIME type, and add the player name within the value element.

Here is an example: `<add key="audio/mpeg" value="WindowsMedia"/>`

As shown, `WindowsMedia` is the only supported player for mp3 files. If you know that other players can run mp3 files, insert additional media players after `WindowsMedia`. To get the exact name of the player, review the `value` elements in web.config file section shown above.

Adding MIME Types

If you want Ektron CMS400.NET to support additional MIME Types, add them within the `<mediaSettings>` element using the following syntax:

```
<add key="MIME type/subtype" value="supported media player(s)"/>
```

For example

```
<add key="video/x-ms-asf" value="WindowsMedia"/>
```

You must also add the file type to the list of supported file types in the assetmanagement.config file. *See Also:* ”Allowing File Types” on page 308

Adding a MIME Type’s Default Player

To identify a player as the default for a MIME type, use the following syntax within web.config.

```
<add key="MIME Type/subtype" value="default player"/>
```

For example

```
<add key="video/x-msvideo-default" value="WindowsMedia"/>
```

Working with Multimedia Files in Ektron CMS400.NET

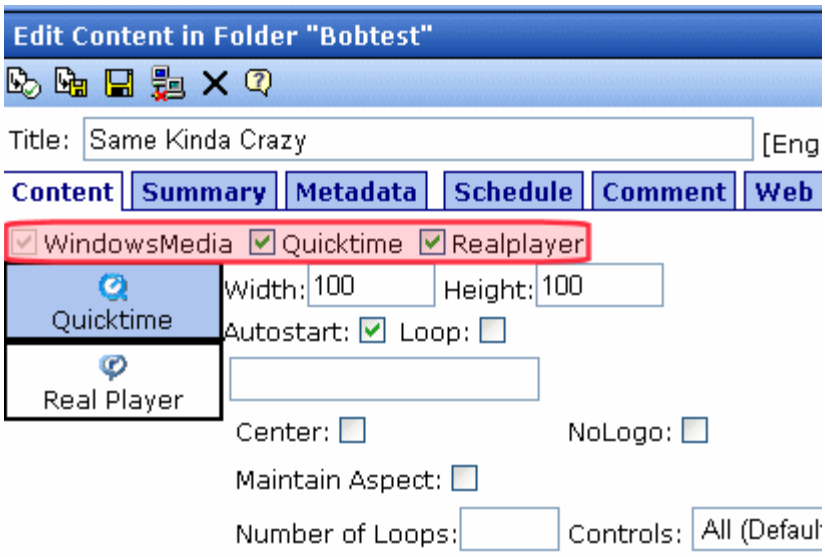
Importing Multimedia Files into Ektron CMS400.NET

You import multimedia files into **Ektron CMS400.NET** the same way you import other assets. Seethe **Ektron CMS400.NET** User Manual chapter “Using the Document Management Functionality,” sections “Working with Managed Files” and “Importing Files via Drag and Drop.“

Once imported into Ektron CMS400.NET, a document proceeds through the same workflow as any other type of content. *See Also:* ”Setting Approval Chains” on page 786

Changing Supported Media Players

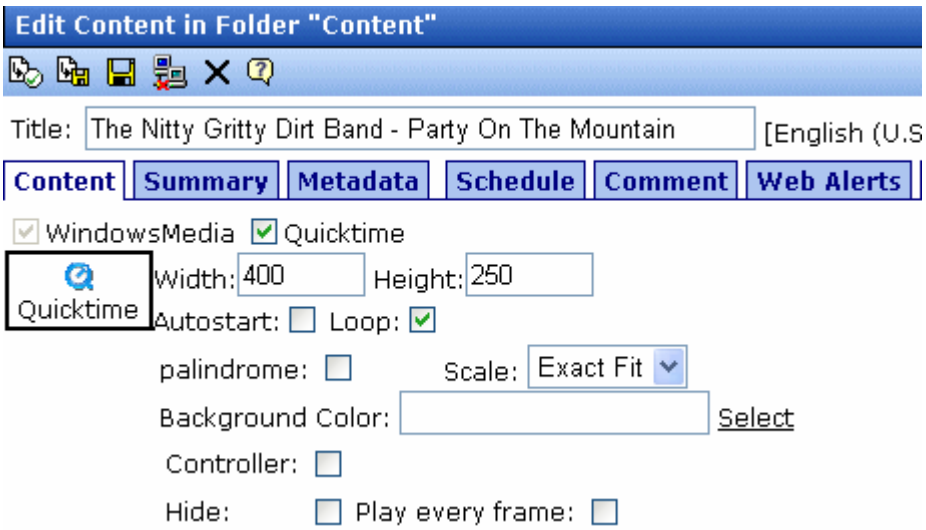
After a multimedia file is imported into **Ektron CMS400.NET**, you can view supported media players' properties on the **Content** tab of the Edit Content screen. All players defined for the file's MIME type are checked. You can uncheck any media players that you do not want to operate a particular file.



If a default media player is defined for a MIME type in web.config, you cannot uncheck its checkbox. In the above graphic, WindowsMedia is the default player.

Changing File Properties

After a multimedia file is imported into **Ektron CMS400.NET**, you can edit its properties on the **Content** tab of the Edit Content screen.



If the file is supported by several players, first check the player whose properties you want to modify, then edit its properties.

The **Width** and **Height** fields determine the size (in pixels) of the media player when it appears in the Workarea and on your Web site. The remaining properties are determined by the media player (QuickTime in the example above).

Inserting a Multimedia File into Content

To insert a multimedia file into content, follow these steps.

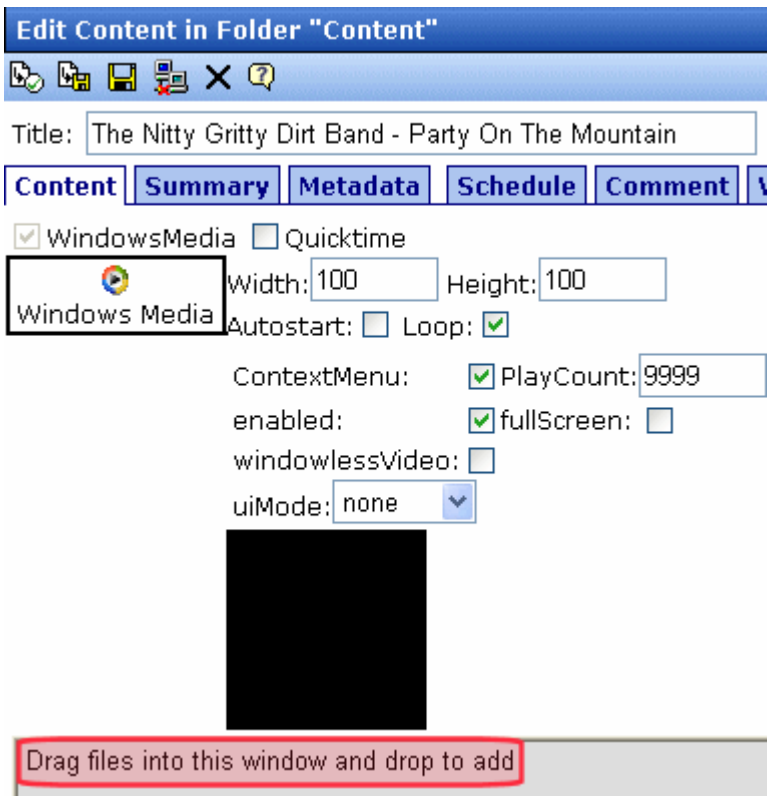
1. Either create a new HTML content item or edit an existing one.
2. Within the content, type text or insert an image that you want site visitors to click to launch the multimedia file. For example: **Click here to begin playing**.
3. Select the image or text you inserted in Step 2.

4. Apply a quicklink to the multimedia file to the selection. This procedure is described in the **Ektron CMS400.NET** User Manual section “Library Folder” > “Quicklinks and Forms.”

Replacing Multimedia Files

If you want to replace a multimedia file but maintain all CMS information about that file (for example, its properties, summary, metadata, etc.), follow these steps.

1. Browse to the folder that contains the multimedia content item.
2. Double click the item.
3. The bottom of the Edit screen has a gray rectangle with the text **Drag files into this window and drop to add**.



4. Open Windows Explorer and navigate to the folder that contains the updated multimedia file.

5. Drag and drop the file into the lower section of the Edit Content screen.
6. Save, Check In, or Approve the content.

Note that after you complete the replacement, you can play and restore older versions of the file through the content's history. For more information, see the **Ektron CMS400.NET** User Manual chapter "Viewing and Restoring Previous Content."

Viewing and Listening to Multimedia Files

Users in the Workarea and visitors to your Web site play interact with multimedia files in the same way.

When either type of user visits a page that hosts a multimedia file, **Ektron CMS400.NET** tries to match media players on the user's computer with those defined in the web.config file for the file's MIME type. **Ektron CMS400.NET** then displays a list of choices for every supported media player for the file. The user selects the preferred one.

Modifying Style Properties of the Multimedia Player

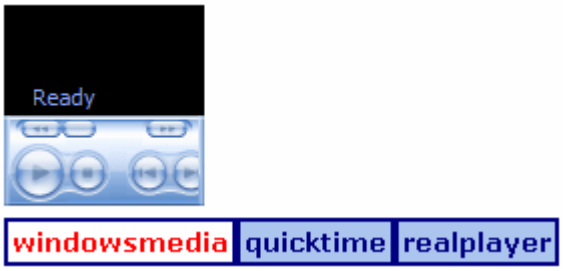
You can change the multimedia player's style properties by modifying the EKTTabs.css style sheet. This file is installed to `site folder/Workarea/csslib`.

For example, you can change the color of the text that selects a player to red by changing the property highlighted below.

```
.EktTabActive

{

    padding: 2px 2px 2px 2px;

    top:10px;

    text-decoration:none;

    position: relative;

    background-color:white;
```

```
    border: solid thin navy;

    color:Red;

    font-weight:bolder;


}
```

Here is the result.



PDF Generation

PDF (Portable Document Format) is a file type designed for distributing compact, platform-independent documents. Each document is self-contained, packing text, graphics, and fonts into a single file.

You can automatically convert Office documents stored in **Ektron CMS400.NET** to the PDF format. As a result, when a site visitor accesses a page containing such a document, he sees the PDF version. Since most computers have a PDF reader, the visitor needs no additional software to view the file.

IMPORTANT! Upon installing **Ektron CMS400.NET**, the Ektron Windows service begins communicating with Ektron's external PDF-generation server. To terminate this communication, disable PDF generation. See "Disabling PDF Generation" on page 1061. Alternatively, you can generate PDFs locally. See "Local PDF Generation" on page 321.

Why use PDF?

- Files easily cross multiple platforms, including Microsoft, Apple, Linux, and Unix.

- Documents keep their formatting and appear the same on a computer screen or when printing.
- File size is typically smaller, which means less bandwidth usage.
- Converted Office documents can be viewed by anyone with a PDF viewer.
- Site visitors do not need a different viewer for each file type.

NOTE **Ektron CMS400.NET** also supports saving MS Office documents in .html format, which is also formatted for a browser.

The following sections explain creating PDFs with the Document Management feature:

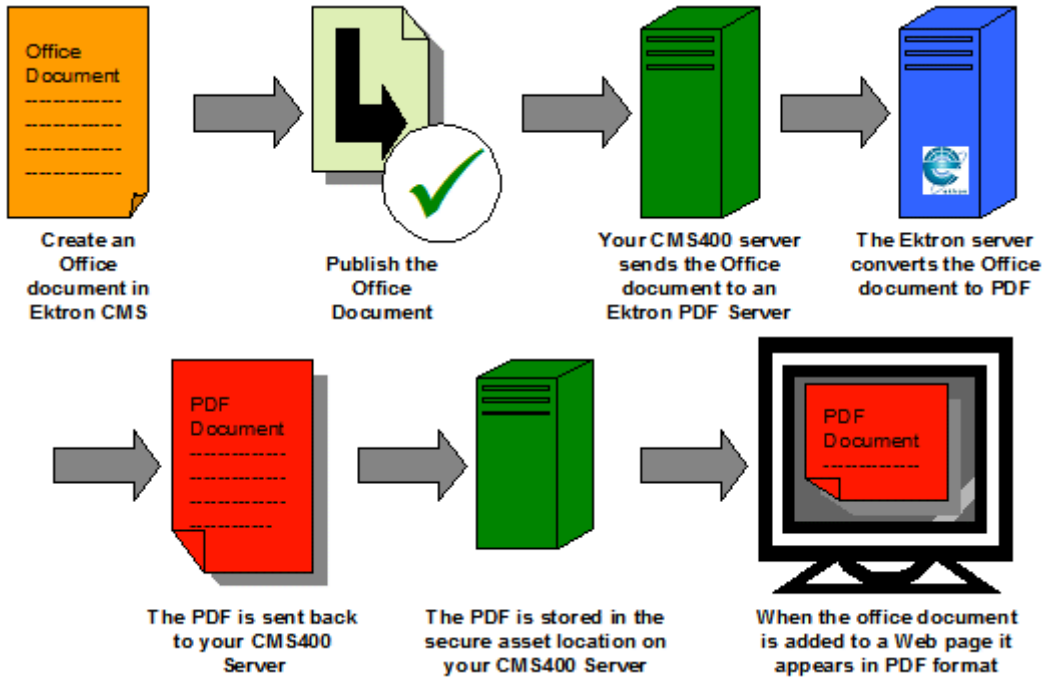
- ”PDF Conversion Process” on page 320
- ”Local PDF Generation” on page 321
- ”Enabling or Disabling PDF Generation” on page 322
- ”Designating a Folder to Generate PDFs Automatically” on page 322

PDF Conversion Process

The PDF conversion of an Office document starts when it is published. At that point, a copy of the file is sent to an Ektron server for PDF generation. After the server generates the PDF, it is returned to your Document Management server.

The PDF file doesn’t appear in the CMS400.NET Workarea -- only the originally-published Office document appears. Ektron CMS400.NET stores the PDF file in a secure location. Subsequent

editing is done in the original Office document. Each time it's published, a new PDF is generated.


Office Document
Create an Office document in Ektron CMS
Publish the Office Document
Your CMS400 server sends the Office document to an Ektron PDF Server
The Ektron server converts the Office document to PDF
PDF Document
The PDF is sent back to your CMS400 Server
The PDF is stored in the secure asset location on your CMS400 Server
PDF Document
When the office document is added to a Web page it appears in PDF format

Once the Office document is added to a Web page, the Web page shows the PDF version. This means site visitors only need a PDF viewer to view any Office document on your site.

The Ektron Windows Service runs the Office-to-PDF conversion process. *See Also:* "Ektron Windows Service" on page 1059

Local PDF Generation

If you purchase software from a PDF generation software vendor, you can create PDF documents on a local network instead of sending them an Ektron server. Reasons for generating a PDF locally include:

- Speed: Office documents can be converted more quickly
- Security: Office documents never leave the local network
- Quality: You can configure the output quality

The following sections explain setting up local PDF generation.

Modifying the PdfGenerator Information in AssetManagement.config

When setting up local PDF generation, use the `PdfGenerator` parameter in the AssetManagement.Config file to provide the location of the local PDF generator. To modify the file, follow these steps.

1. Open the `AssetManagement.Config` file, located in your site root folder.
2. Change the location of the PDF generator.

   For example:

```
PdfGenerator="http://aspnet20.ektron.com/PdfManager/PdfGeneratorService.asmx"
```

   might become

```
PdfGenerator="http://localhost/PdfManager/PdfGeneratorService.asmx"
```

3. **Save** and **Close** the file.

Enabling or Disabling PDF Generation

Administrators decide if this feature is enabled and to which folders it applies. After enabling this feature, administrators can change any folder's properties to allow PDF generation.

Follow these steps to enable or disable this feature.

1. In the CMS Workarea, go to **Settings > Configuration > Setup**.
2. Click the **Edit** button ( ).
3. Click the **Enable Office Documents to be Published in other Format** checkbox.
4. Click the **Save** button ( ).

Designating a Folder to Generate PDFs Automatically

By setting a folder's properties to allow PDF generation, all Office documents published in that folder have a PDF created for them.

For an introduction to PDF generation, see ”PDF Generation” on page 319.

The steps below explain how to change the folder property for PDF generation.

NOTE Existing subfolders do not inherit PDF generation. Each subfolder needs to be set individually. However, a new subfolder inherits the PDF generation setting from its parent folder. Administrators can change the setting while creating a new subfolder.

1. In the Workarea, click the **Content** folder button.
2. Click the folder for which you want to enable PDF generation.
3. Click **View > Folder Properties**.
4. Click the **Edit Properties** button ( ).
5. Click the **Publish Office Documents as PDF** radio button.
6. Click **Save** ( ).

Adding Assets Automatically

The Auto Add Asset feature automatically transfers assets placed in a specified folder into **Ektron CMS400.NET**.

It’s a very helpful feature if, for example, several users work with assets, you want to manage them with **Ektron CMS400.NET**, but the users creating or updating the assets have neither **Ektron CMS400.NET** licenses nor the client software installed. These users simply place the assets in a folder, and the Auto Add Asset feature moves them to **Ektron CMS400.NET**.

The Auto Add Asset feature is very flexible. While setting it up, you can determine the following aspects of how it works.

- whether it uploads a single asset, multiple assets, a folder, or a folder and its subfolders
- the location of the uploaded assets
- if subfolders are included, do you want to mirror that structure within **Ektron CMS400.NET**?
- file types that can be uploaded

- how frequently the specified assets or folders are checked for new content

The rest of this section explains the Auto Add Asset feature through the following topics.

- ”Installing the Auto Add Asset Feature” on page 324
- ”Updating the Configuration File” on page 325
- ”Start the Auto Add Asset Service” on page 329
- ”Testing the Auto Add Asset Feature” on page 329

Installing the Auto Add Asset Feature

Follow these steps to install the Auto Add Asset Feature.

1. Verify that **Ektron CMS400.NET** is running basic authentication in IIS. For information on how to do this, see

   - IIS 6 - http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/abbca505-6f63-4267-aac1-1ea89d861eb4.mspx?mfr=true.

   - IIS 7 - http://technet.microsoft.com/en-us/library/cc772009.aspx

2. Create the following directories in the file system of the computer that will transfer the assets to **Ektron CMS400.NET**.

- **Input** - place assets in this directory before uploading them to **Ektron CMS400.NET**
- **Backup** - assets are moved to this directory after they are uploaded to **Ektron CMS400.NET**
- **Error** - assets are moved to this directory if there was a problem moving them to the `input` folder

3. To each computer that will run the Auto Add Asset Feature, copy the `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities\AssetWorkerSetup.msi` file and run it.

   This program creates a new folder, `C:\Program Files\Ektron\AssetWorkerSetup`.

4. Test that the Web Services are working. To do that, browse to the following page:

http://*localhost/cms400min*/workarea/webservices/assetservice.asmx

NOTE Replace **localhost** with your server name and **CMS400min** with your site name.

The page displays two Web services: **AddAsset** and **MakeFolderIfNoExists**.

Updating the Configuration File

After installing the Auto Add Asset feature, you can modify the configuration file, which lets you customize the feature to fit your particular needs.

The file's name and folder path is `C:\Program Files\Ektron\AssetWorkerSetup\maindata.config`. The following table describes its elements.

Element	Description
DmsUserName	The user created during the install.
DmsPassword	The password for the user created during the install. This password is encrypted during the install. If you are changing the user and need to encrypt a new password, use the `dms400encryptpassword.exe` encryption tool located in `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\Utilities\DMS`.
DmsUserDomain	The domain for the user created during the install.
DmsServer	The name of the server on which DMS is running.
CmsUserName	By default, **Ektron CMS400.NET** inserts the user name **vs**. This is a special user that lets you work in Visual Studio.net while signing into CMS as an administrator. Note: "Securing Ektron CMS400.NET," on page v advises you to remove the VS user. If you do, you must create a new user, assign him to the Administrators groups, and enter his username and password in these fields.

Element	Description
CmsPassword	By default, **Ektron CMS400.NET** inserts the password of the VS user. If you change the VS user's password, or change the CMS UserName, enter the new password here. Note: "Securing Ektron CMS400.NET," on page v advises you to remove the VS user. If you do, you must create a new user, assign him to the Administrators groups, and enter his username and password in these fields.
CmsUserDomain	Enter the Domain Name, IP Address or Machine Name. An example is `localhost`. A Web client system uses this address to open managed documents through HTTP.
Protocol	Enter the protocol used to transfer the assets: `http` or `hhtps`.
CmsSite	Enter the path to your Web site root. For example, one of **Ektron CMS400.NET**'s sample site's root is `http://localhost/CMS400min`.
DmsSite	Enter the path to your Asset Management folder. For example, one sample site's Asset Management folder is `http://localhost/CMS400min/AssetManagement`.
ConfigType	Enter the type of file upload you want. Choices are: • file • multifile • folder • autofile • autofolder • autofoldercreate • multifolder • automultifolder • automultifoldercreate These choices are explained in "File Upload Types" on page 327.

Folder:
• Input
• Backup
• Error
	Enter paths to the folders you created in Step 2 of "Installing the Auto Add Asset Feature" on page 324. An example is below.
	`<Input>C:\Test\Input</Input>`
	`<Backup>C:\Test\Backup</Backup>`
	`<Error>C:\Test\Error</Error>`

Element	Description
MultiFolder	If your choice at the `ConfigType` element is listed below, use this element to specify the folders. • multifolder • automultifolder • automultifoldercreate Separate each folder with the pipe character (|). Here is an example. `C:\AutoAddAsset\InputPhotos|C:\AutoAddAsset\InputWorddocs|C:\AutoAddAsset\InputPDFs`
CreateFolder	
FileTypes	Enter all file types that can be added using the Auto Add Asset feature. To identify a file type, enter an asterisk(*), a period (.) and the file's extension. Separate each file type with a comma. Here is the sample list that appears by default: `*.doc,*.xls,*.ppt,*.pdf,*.gif,*.jpg,*.jpeg,*.txt,*.log,*.vsd,*.dot,*.zip` Note: The **FileTypes** field in the Assetmanagement.config file determines which files can be used within **Ektron CMS400.NET**. You should not enter file types here that are not listed in AssetManagement.config. *See Also:* "Allowing File Types" on page 308

File Upload Types

There are nine methods for uploading files from the input folder into **Ektron CMS400.NET**. The following table explains the options and how each works.

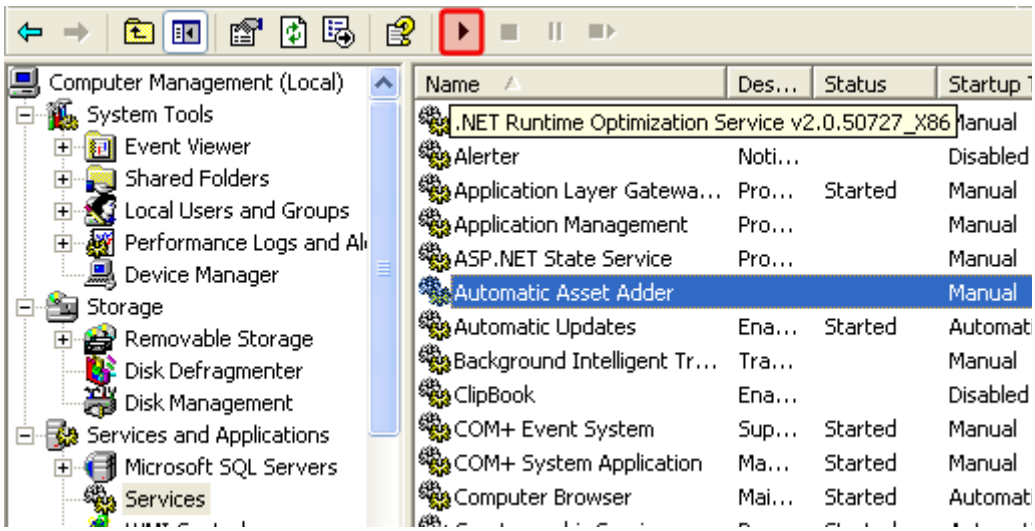
File Upload Type	What is uploaded	If folder, are subfolders also scanned for assets?	Are new files uploaded automaticall y?	CMS folder structure set up to match your file system?
File	One file	na	no	no
Multifile	Multiple individual files separated by a pipe	na	no	no

File Upload Type	What is uploaded	If folder, are subfolders also scanned for assets?	Are new files uploaded automatically?	CMS folder structure set up to match your file system?
Folder	One folder	no	no	no
Autofile	One folder	no	yes	no
Multifolder	All specified folders Note: Specify the folders at the Multifolder element. See "MultiFolder" on page 327	yes	yes	no
Autofolder	All files in specified folder	yes	yes	no
Autofoldercreate	All files in specified folder	yes	yes	yes
Automultifolder	All files all specified folders Note: Specify the folders at the Multifolder element. See "MultiFolder" on page 327	yes	yes	no
Automultifoldercreate	All files all specified folders Note: Specify the folders at the Multifolder element. See "MultiFolder" on page 327	yes	yes	Yes Note: Changes to files already uploaded are considered new assets

Start the Auto Add Asset Service

The Auto Add Asset feature uses a Windows Service to transfer assets to **Ektron CMS400.NET**. You must begin the service manually every time you start Windows. Follow these steps to start the Auto Add Asset Service.

1. Go to Windows **Control Panel** > **Administrative Tools** > **Computer Management**.
2. Click **Services and Applications** > **Services**.
3. Click the start button (circled below) to start the Automatic Asset Adder service.



Testing the Auto Add Asset Feature

After completing the above steps, you should verify that the Auto Add Asset feature is working. To do this, follow these steps.

1. Place files of the appropriate type into the specified input folder.
2. Open `C:\Program Files\Ektron\AssetWorkerSetup\AssetWorker.exe.config` with a text editor such as Notepad.
3. Change the value of the `PollInterval` element to 10000. Save and close the file.

4. The input folders will be checked for files every 10 seconds. They should appear within the **Ektron CMS400.NET** shortly.

Merging Indexing Service Catalogs

This section explains how to merge two Windows Indexing Service catalogs. You need to do this if your server has more than the maximum allowed number of 26 catalogs.

NOTE The maximum number of catalogs is determined by Microsoft's Windows Indexing Service.

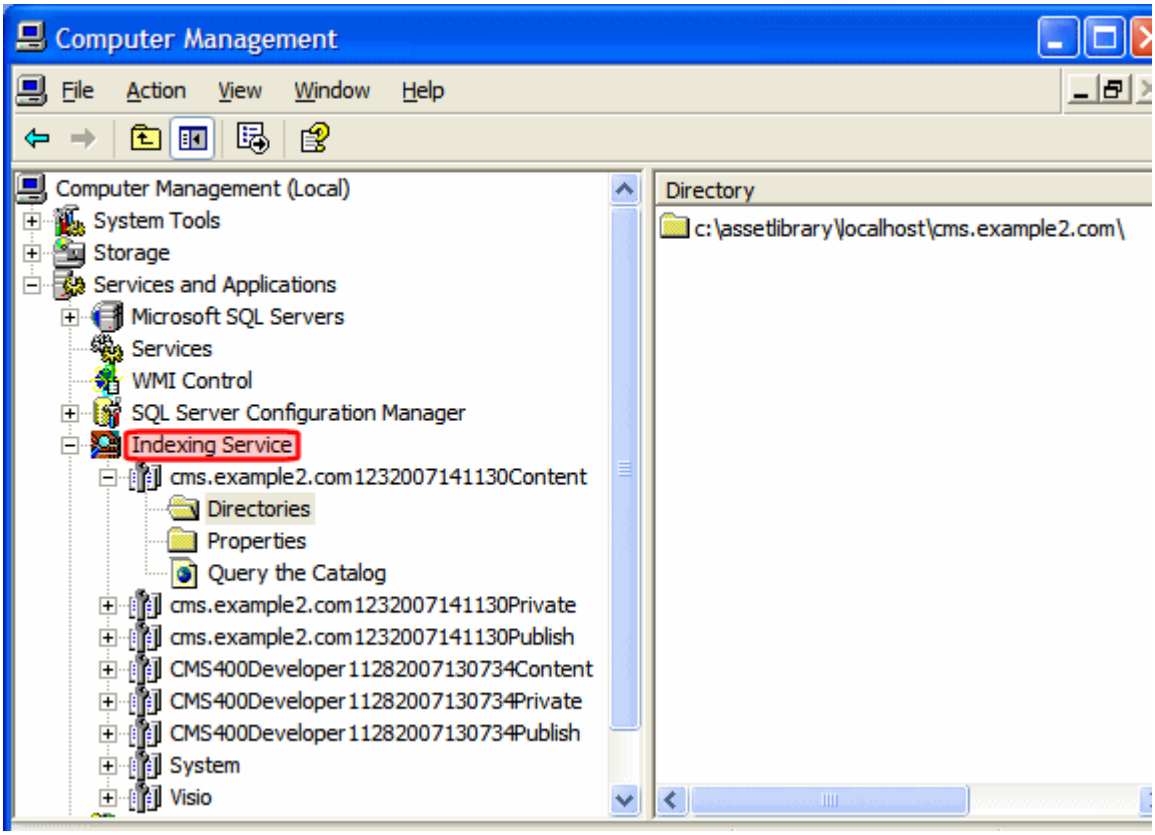
See Also:

- "Windows Indexing Service Catalogs" on page 330
- "Conditions for Merging Catalogs" on page 332
- "Procedure for Merging Catalogs" on page 332

Windows Indexing Service Catalogs

IMPORTANT! When you install more than three Web sites to a server, the catalogs for additional sites are automatically merged with one of the three existing Web site's catalogs. An existing Web site's catalogs are chosen for merging based on the site with the least amount of directories to index. When a Web site's catalogs are merged with another, the information for each site is kept separate.

Each **Ektron CMS400.NET** site has three catalogs. In addition, your server may have catalogs for other applications that use the Windows Indexing service. Below is an example of what your Indexing Service catalogs might look like.



Note that the first six catalogs support two **Ektron CMS400.NET** web sites: Cms.example2.com and CMS400Developer. Each site has three catalogs:

- Content
- Private (assets)
- Publish (assets)

Each catalog has a **Directories** folder, which lists the directories of the content being indexed.

Why Merge Catalogs?

The merge reduces the number of catalogs on your server, yet still indexes each site's content for the search. After you merge the catalogs, each site's search is still limited to content on that site --

the search does not find content from other sites even though several sites now reside in one catalog.

When merging catalogs, you copy the directory of the “merge from” catalog to the Directories folder of the “merge to” catalog. Then, you delete the “merge from” catalog.

Conditions for Merging Catalogs

- You can only merge **Ektron CMS400.NET** catalogs if the Web sites use the same major point release. For example, you can merge catalogs from two sites with Release 7.0.4, or a 7.5.0 site with a 7.5.1 site. But you cannot merge a 7.0.4 site with a 7.5 site, because catalog properties change between releases.
- Each **Ektron CMS400.NET** site has three catalogs.

  - publish

  - private

  - content

  You must merge the same catalog type between sites. So, for example, you cannot merge a publish with a private catalog.

Procedure for Merging Catalogs

As an administrator, you can merge different Web sites’ catalogs by using Ektron's MergeCatalog.exe command line utility or by performing the merger manually. For information on

- Ektron’s MergeCatalog.exe command line utility - see ”Using the MergeCatalog.exe Utility” on page 332
- performing the catalog merger manually - see ”Manually Merging Catalogs” on page 333

Using the MergeCatalog.exe Utility

There are two ways to use this utility. The first allows you to merge all of your Web sites’ catalogs until you have only three catalog sets. For example, if you have five Web sites, you can merge their catalogs down to the equivalent of three sites. To merge your catalog sets down to three, run the MergeCatalog.exe file located in the following folder.

```
C:\Program Files\Ektron\CMS400v7x\Utilities\MergeCatalog.exe
```

The second way allows you to merge catalogs from one specified Web site to another. For example, you want to merge the catalogs from your CMS400Developer site to your eIntranet site. *See Also:* "Merging Catalogs from One Web Site to Another" on page 333

Merging Catalogs from One Web Site to Another

To use Ektron's MergeCatalog.exe utility, follow these steps:

1. Open a command prompt.
2. Change the directory to `C:\Program Files\Ektron\CMS400v7x\Utilities.`
3. Run the `MergeCatalog.exe` utility.

   Usage: `MergeCatalog "<fromCMS400dir>" "<toCMS400dir>"`

   Below is an example of using the MergeCatalog.exe command line utility to merge the *CMS400Developer* Web site's catalogs with the *eIntranet* site's catalogs.

   ```
   MergeCatalog "I:\inetpub\wwwroot\CMS400Developer"
   "I:\inetpub\wwwroot\eIntranet"
   ```

Once the merge is complete, the following message appears in the command box.

"Switching shared catalogs for site at <fromCMS400dir> into site at <toCMS400dir>
Restarting Ektron Windows Service
Catalogs Merged"

Manually Merging Catalogs

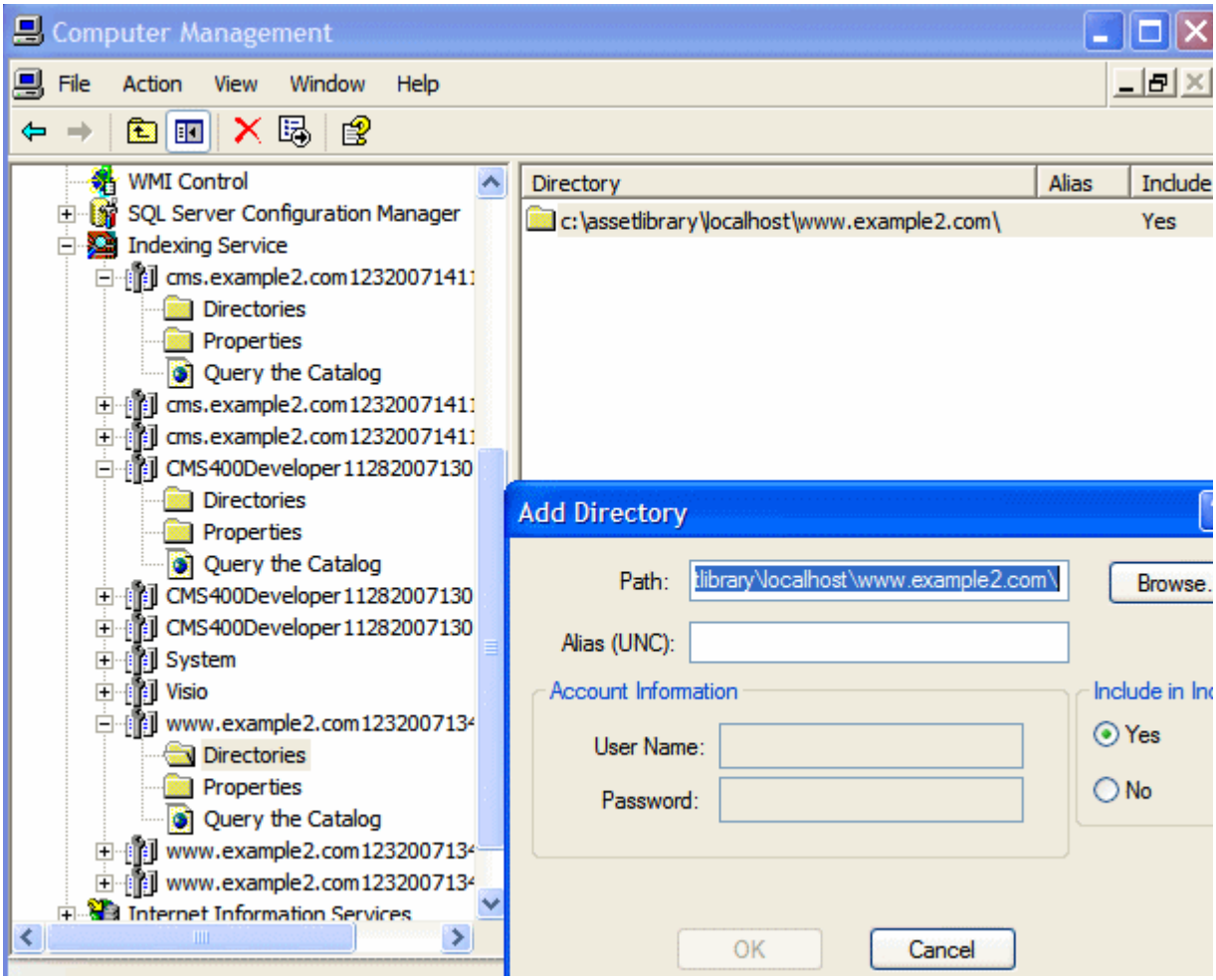
Follow these steps for all three catalogs on each site: Content, Private and Publish.

Part 1: Copy the "From" Catalog Path to a New Directory in the "To" Catalog

In this part, you create a new directory in the "to" catalog. Point the new directory to the "from" catalog folder. Then, delete the "from" catalog.

1. Open **Computer Management > Services and Applications > Indexing Service**.
2. Select the first catalog that you want to merge *from* (that is, the catalog you will delete after merging).

3. Click its **Directories** folder.
4. The directory appears in the right pane.
5. Double click it. The Add Directory dialog appears.



6. Press <Ctrl> + <C> to copy the **Path** field.
7. In the left panel, select the corresponding “to” catalog, the one into which you will merge the “from” catalog.

WARNING! Make sure the catalog types match: content > content, publish > publish, private > private.

8. Right click the mouse and select **New > Directory**. The Add Directory dialog appears.

9. In the **Path** field, paste the path you copied in Step 7 and press **OK**.
10. Repeat these steps for the other two catalogs on the site that you are merging.
11. Click **Indexing Service** then stop the Indexing service.
12. Delete the three “from” catalogs.
13. Click **Indexing Service** then restart the Indexing Service. This action begins indexing the files in the new directory.

Part 2: Update .Config Files with the New Catalog Location

In this part, you open Windows Explorer and navigate to “from” Web site, that is, the site whose catalog you deleted above. There, you point its web.config and assetmanagement.config files to the new catalog.

1. Open **Computer Management > Services and Applications > Indexing Service**.
2. Find the catalogs that you have merged into.
3. Resize the window so that it occupies the left half of the screen.
4. Open Windows Explorer.
5. Navigate to the Web site whose catalog you deleted in ”Part 1: Copy the “From” Catalog Path to a New Directory in the “To” Catalog” on page 333.
6. In the site root folder, open the web.config file.
7. Resize the window so that it occupies the right half of the screen.

   You should see the Computer Management screen on the left, and the web.config file on the right.
8. In web.config, find the element `<webSearch defaultProvider="MSIndexDialectServer">`.

NOTE Don’t confuse the `MSIndexDialectServer` tag with `MSIndexServer`. You only need to change `MSIndexDialectServer`.

9. Shortly after that are `catalogName` and `privateCatalogName`.
10. Replace the value of `catalogName` with the name of the publish catalog, visible in the Computer Management screen. For example:

```
catalogName="CMS400Developer11282007130734Publish"
```

11. Replace the value of `privatecatalogName` with the name of the private catalog. For example:

```
catalogName="CMS400Developer11282007130734Private"
```

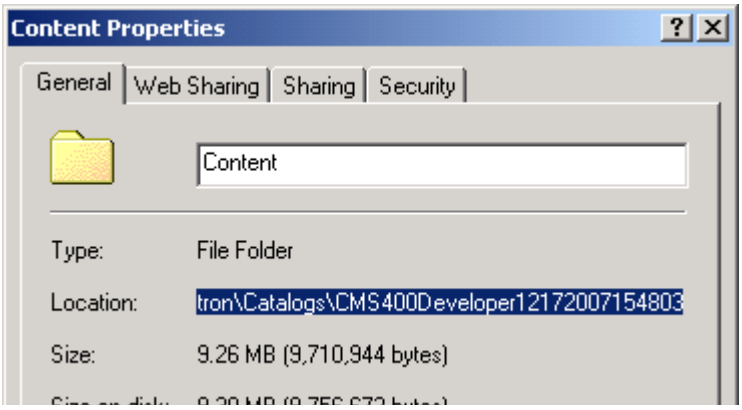
12. Save the web.config file.
13. In the site root folder, open the AssetManagement.config file.
14. Resize the window so that it occupies the right half of the screen.

    You should see the Computer Management screen on the left, and the AssetManagement.config file on the right.
15. In AssetManagement.config, find the element `CatalogName`.
16. Replace the value of `CatalogName` with the name of the content catalog, visible in the Computer Management screen. For example:

```
catalogName="CMS400Developer11282007130734Content"
```

17. Replace the value of `CatalogLoc` with the path to the newly-merged catalog. To get the path:

    - open Windows Explorer.
    - navigate to the folder to which the catalog is being copied. For example, `C:\Program Files\Ektron\Catalogs\CMS400Developer11282007130734\Content`
    - right click the folder and select **Properties**.
    - copy the **Location** field.



    - Select the assetmanagement.config file's `CatalogLoc` tag.

- replace the path with the copied one. For example.

```
catalogName="C:\Program Files\ Ektron\Catalogs\CMS400Developer11282007130734\Content"
```

18. Copy the "to" catalog name and path entered in steps 16 and 17 to the other catalogs and locations: `PublishCatalogName`, `PublishCatalogLoc`, `PrivateCatalogName`, and `PrivateCatalogLoc`.
19. Save the AssetManagement.config file.
20. Stop and restart the Ektron Windows Service.

TIP! If you still have the Computer Management screen open, you can quickly navigate to Services and Applications > Services > Ektron Windows Services 2.0.

Troubleshooting

This section explains how to fix problems that may occur with **Ektron CMS400.NET** assets.

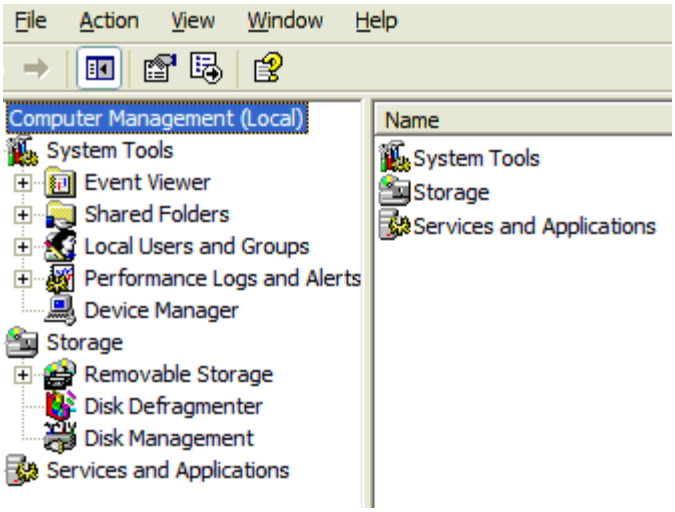
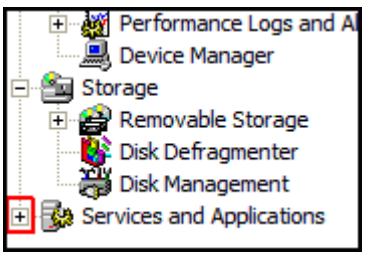
Symptom	See this section
Error message: Install Indexing Service	"Setting Up the Indexing Service" on page 338
A search of asset files finds no assets on your Web site	"Turning on the Asset Indexing Service" on page 352 or "Merging Indexing Service Catalogs" on page 330
You cannot drag and drop assets into **Ektron CMS400.NET**	"Removing Front Page Server Extensions" on page 358
When a user drags a document, the file opens in the browser instead of generating an "Uploading" notification	Ektron KB Article: http://dev.ektron.com/kb_article.aspx?id=14204
The server running **Ektron CMS400.NET** is running slowly; much of its resources are being used even though the computer is idle	"Disabling the System Indexing Service" on page 346
Error message after trying to upload documents: **Failed with error - 2147217911**	"Removing aspnet_isapi.dll from the List of Wildcard Application Maps" on page 349

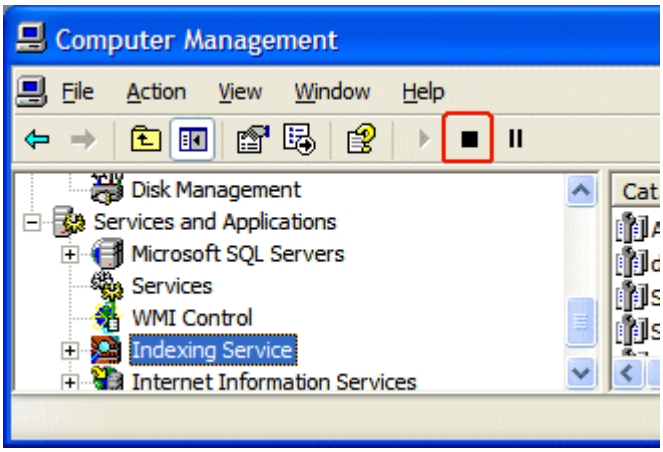
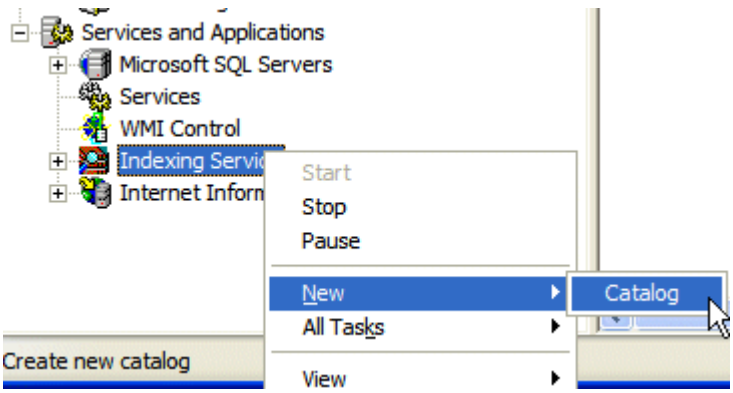
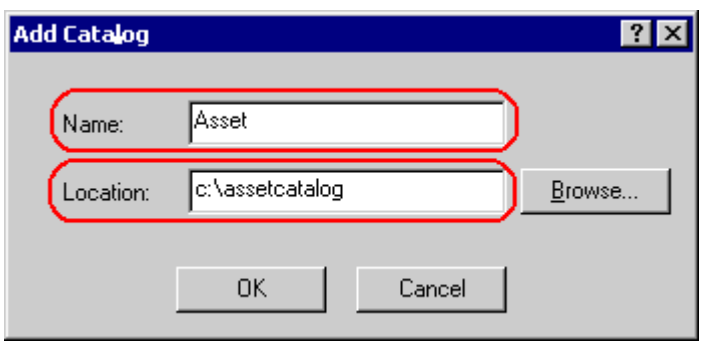
Symptom	See this section
Error message: Windows Server 2003 no longer ships MSDAIPP.DLL, thus connecting to an FPSE server through Webfolders, is no longer possible.	"Using Microsoft Windows Server 2003 as a Client (Web Folders Setup)" on page 353
While trying to drag and drop an asset, an error message appears: **The target directory already exists**.	Check the `impersonate` element of the web.config file. If it is set to `true`, make sure the anonymous access account has at least write access to the `dmdata` and `assets` directories.
When you try to publish DMS documents, **Ektron CMS400.NET** sometimes does not allow them to update.	Make sure your production server is not running Windows XP. You cannot use XP as a production server for DMS.
After recently moving the ASM database to a new SQL server that has never hosted an ASM database, the following error appears while adding a DMS asset: AssetManagement error: Failed to save asset. Internal Message: RAISERROR could not locate entry for error 2000000002 in sysmessages. at Ektron.ASM.Documents.Asset.Create(en AssetStatus state) at	"ERRMSG: AssetManagement error: Failed to save asset" on page 356

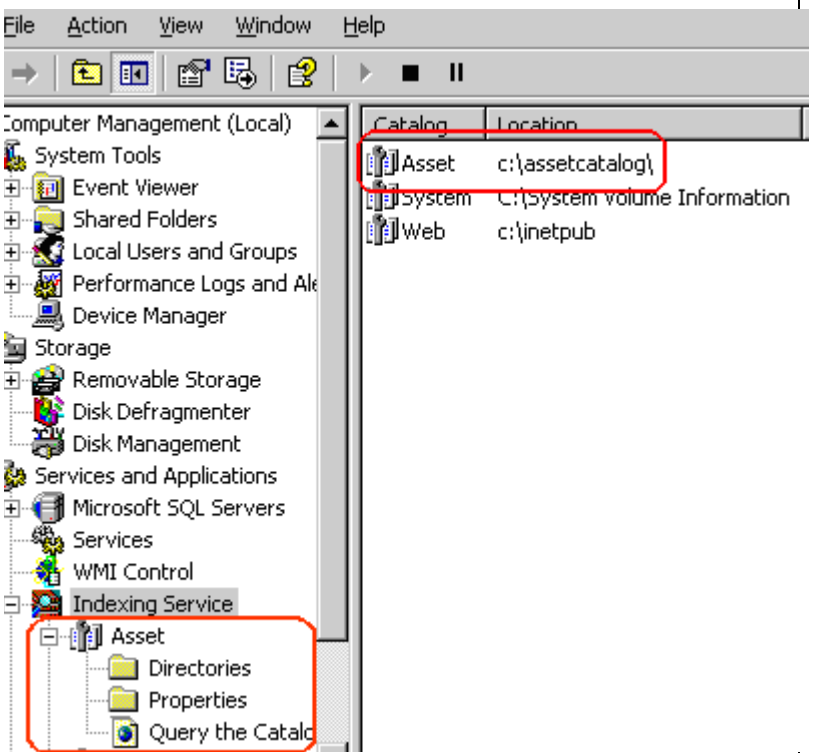
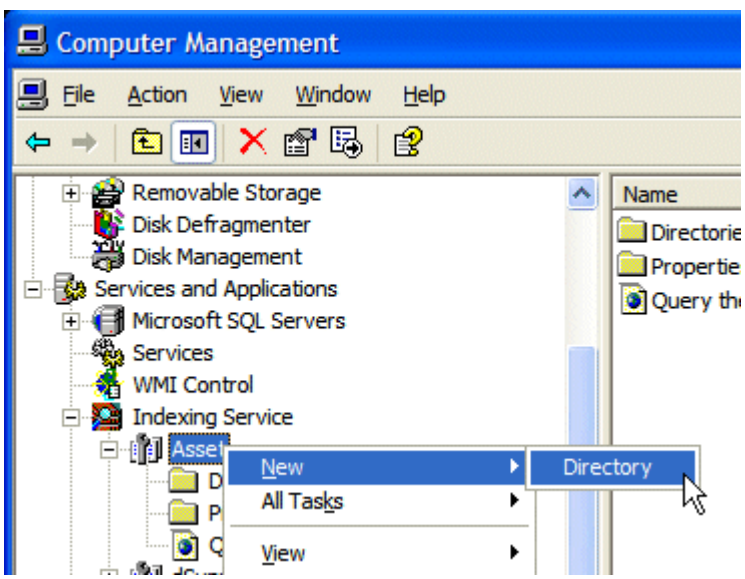
Setting Up the Indexing Service

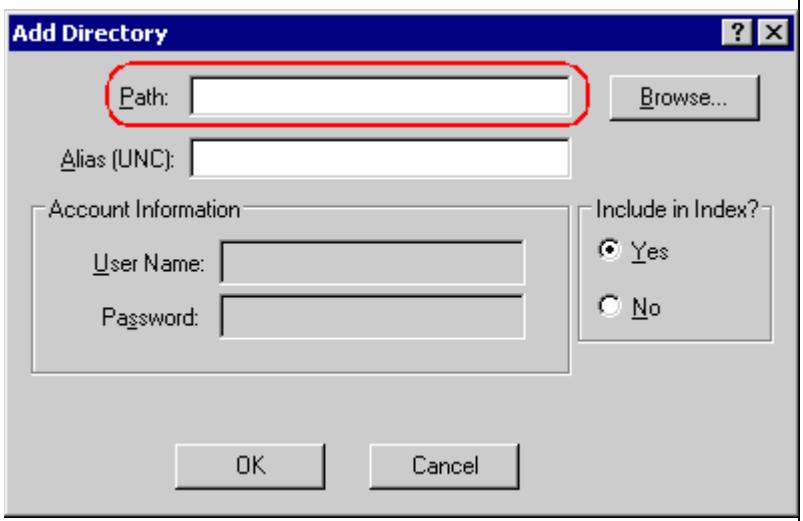
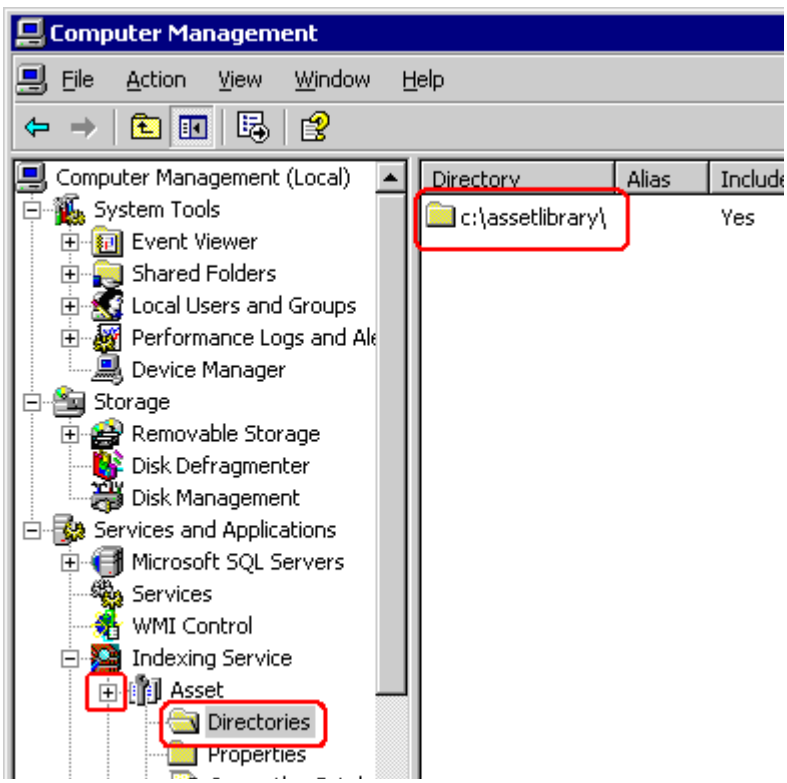
If you see the following error during installation, you need to set up the indexing service manually.

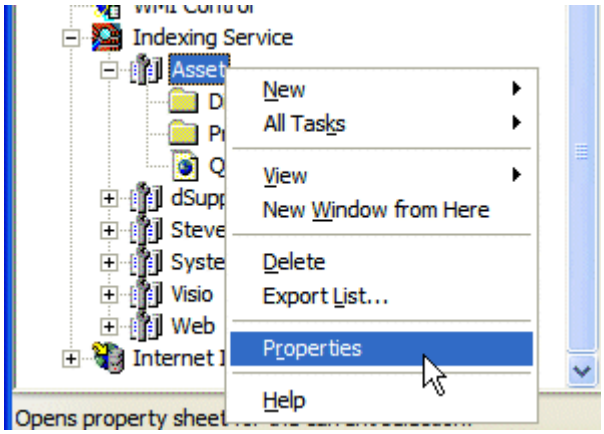
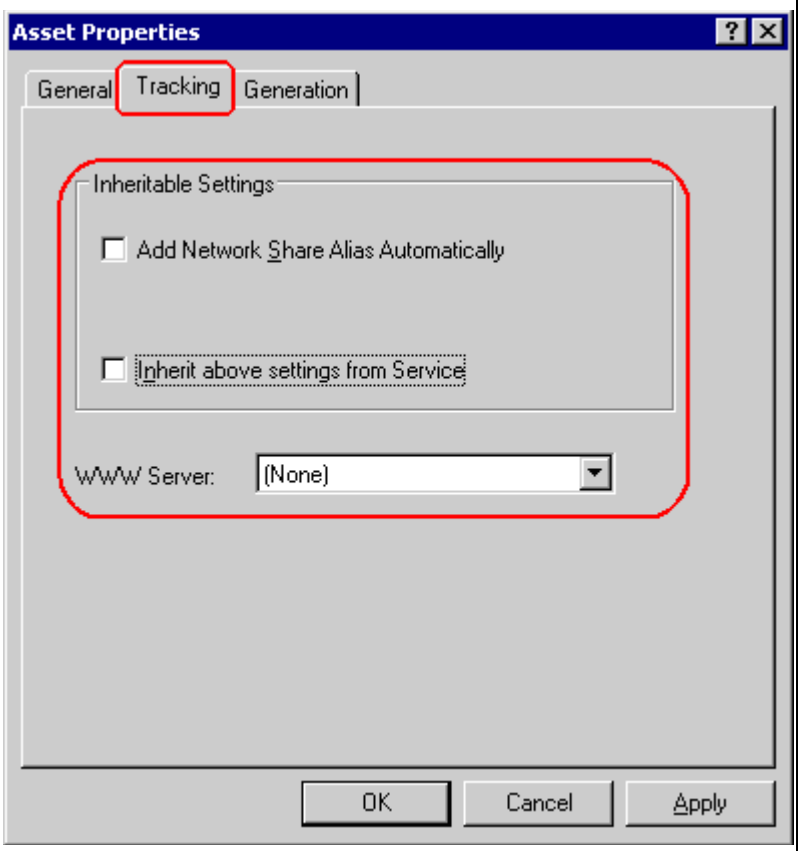
The following steps explain how to do that.

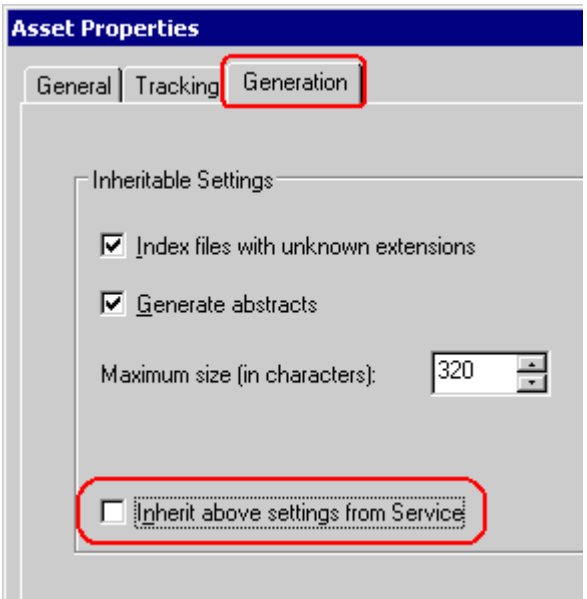
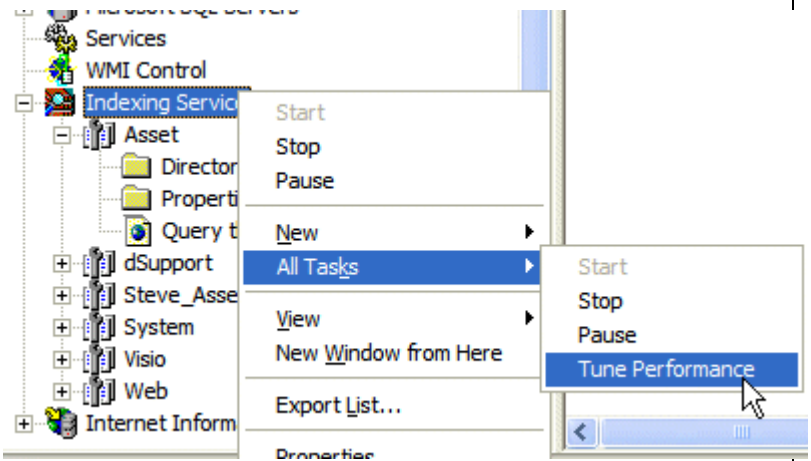
Step	Screen
1. Click **Start > Control Panel > Administrative Tools > Computer Management**. The Computer Management screen appears.	
2. Click the plus sign (**+**) next to **Services and Applications**.	
3. Click **Indexing Service**.	

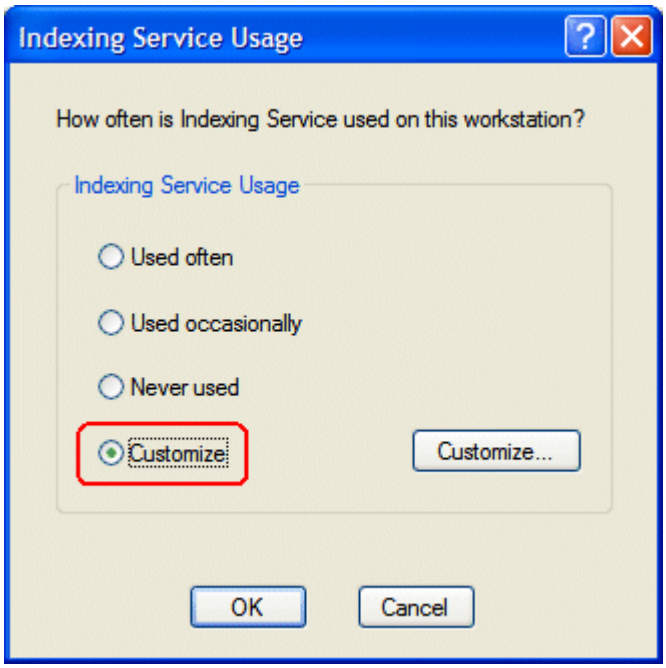
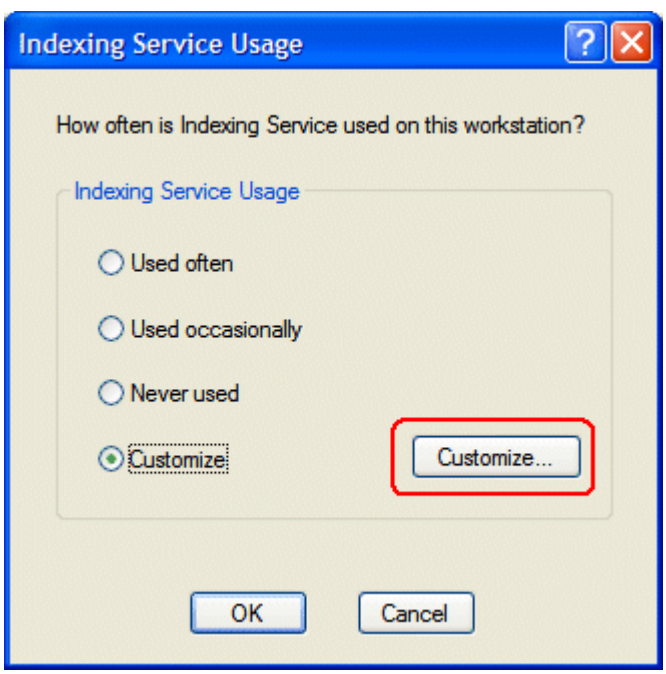
Step	Screen
4. Click the stop button to halt the indexing service if it is running. Note: If the Index service is running, the start button is grayed out.	
5. Right click **Indexing Service,** then click **New > Catalog**.	
6. At the Add Catalog Screen: • In the **Name** field, add the catalog name. • In the **Location** field, identify the folder that will store the asset catalog. Note: By default, during installation, **Ektron CMS400.NET** names the catalog **Asset** and associates it with the location `c:\assetcatalog`. The installer can change the default location.	

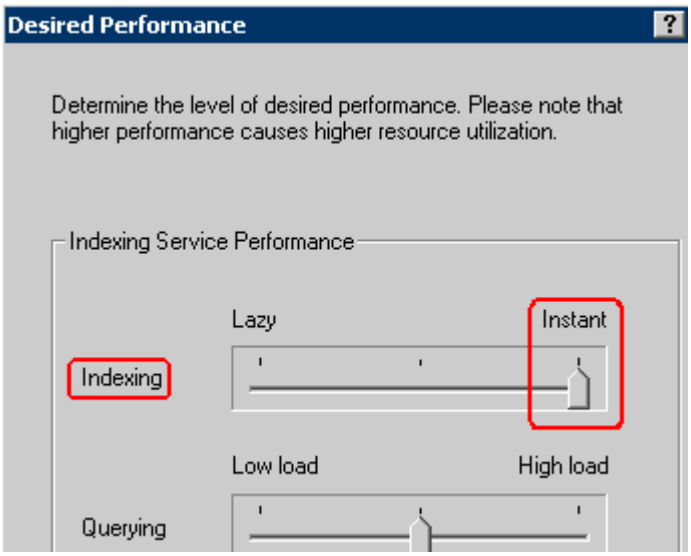
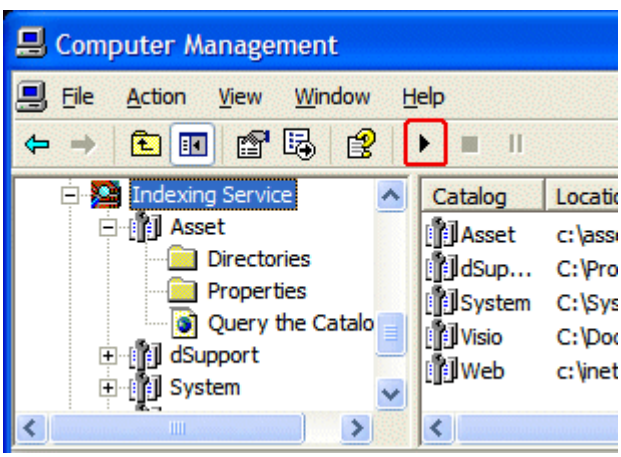
Step	Screen
7. Click **OK**. The Computer Management screen shows your new Indexing Service.	
8. Right click the **Asset** catalog, then click **New > Directory**. This is the directory the service indexes.	

Step	Screen
9. In the **Path** text box, add the folder of the secure storage location. Make sure the **Include in Index** radio button is marked **Yes**. Note: By default, during installation, **Ektron CMS400.NET** uses `c:\(Domain Name, IP Address or Machine Name)\assetlibrary`.	
10. Click **OK**. Then, click the plus sign (**+**) next to **Asset** to view the Directories folder. In the Directories folder, the new directory is displayed.	

Step	Screen
11. Right click **Assets**, then click **Properties**.	
12. On the **Tracking** tab, uncheck all boxes and choose **None** for **WWW Server**.	

Step	Screen
13. On the **Generation** tab, uncheck **Inherit above settings from Service**. Then click **OK**. The **Index files with unknown extensions** and **Generate abstracts** check boxes can be checked or empty. It is your choice.	
14. Right click **Indexing Service**, then click **All Tasks > Tune Performance**.	

Step	Screen
15. Click the **Customize** radio button.	
16. Click the **Customize button**.	

Step	Screen
17. Change **Indexing** to **Instant**.	
18. Click **OK** and **OK** again to close both dialog boxes.	
19. Click the **Start** button to start the service again.	

Disabling the System Indexing Service

Symptom

The server running **Ektron CMS400.NET** is running slowly; much of its resources are being used even when the computer is idle.

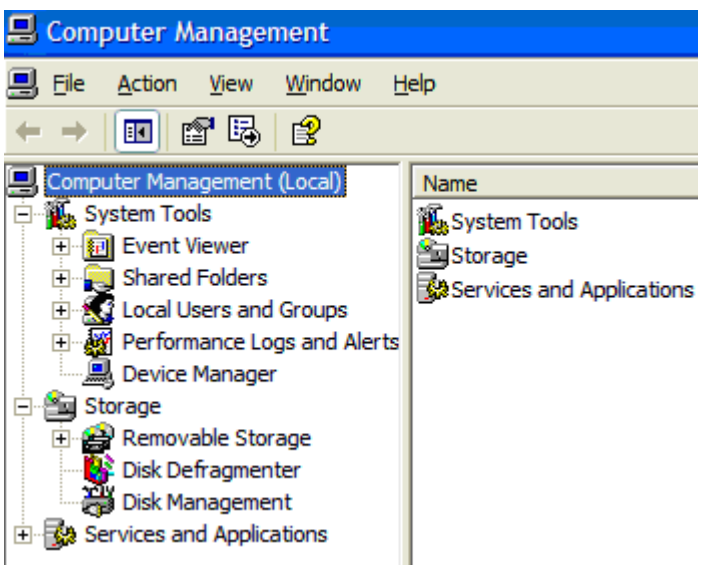
Cause

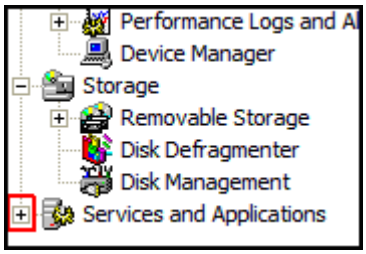
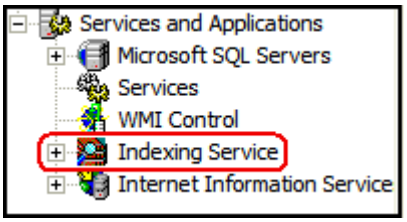
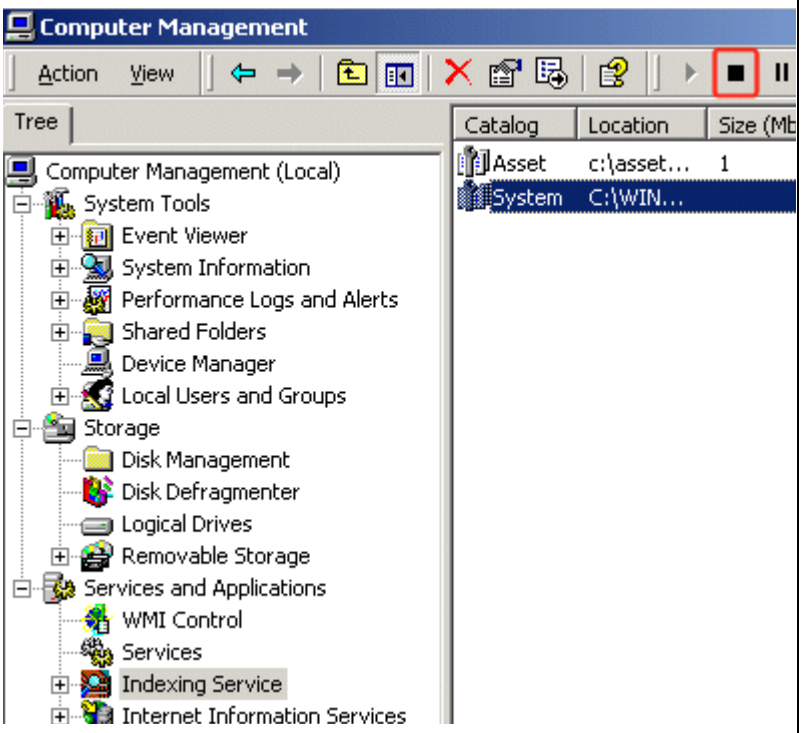
The Microsoft Windows Indexing service is turned on during installation. This service indexes every file on the server, and the resources required to carry out that task slow down other activities.

NOTE Ektron recommends turning off *all* indexing services other than the DMS Asset indexing service.

Resolution

Follow these steps to disable the Windows indexing service. This change does not affect DMS's ability to find files because it uses a different indexing service.

Step	Screen
1. Click **Start > Control Panel > Administrative Tools > Computer Management**. The Computer Management screen appears.	

Step	Screen
2. Click the plus sign (**+**) next to **Services and Applications**.	
3. Click **Indexing Service**.	
4. Click the Stop button to stop the indexing service.	

Removing aspnet_isapi.dll from the List of Wildcard Application Maps

Symptom

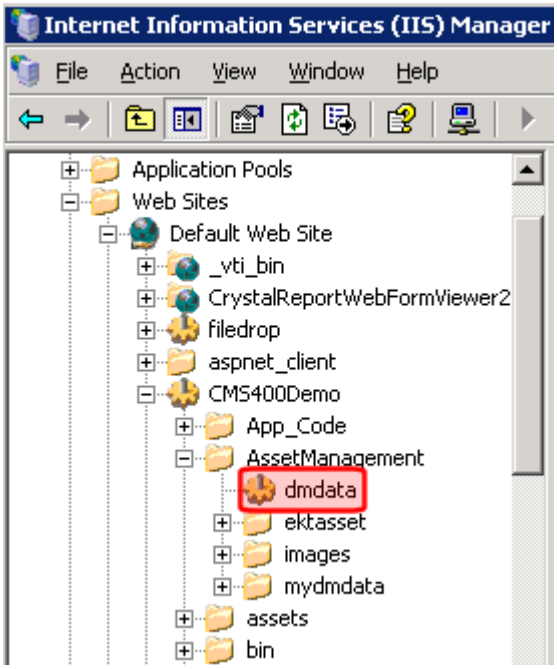
When you try to upload an asset, you get the error message “Failed to upload documents.”

Cause

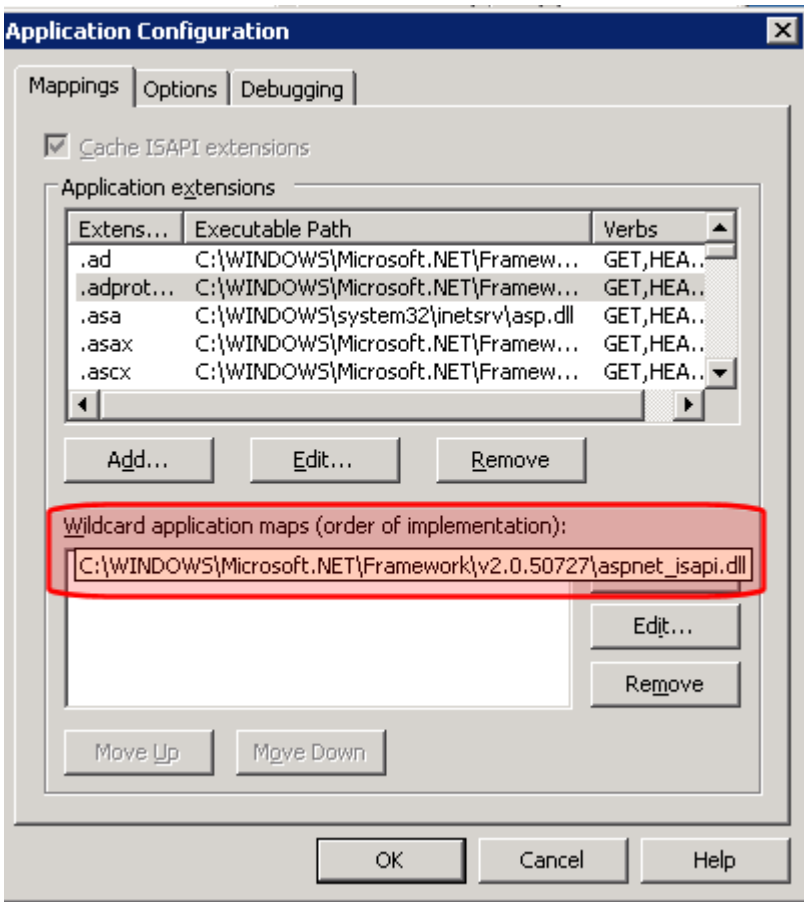
Remove the aspnet_isapi.dll from the list of Wildcard Application Maps.

Resolution

1. Open IIS.
2. Go to your **Ektron CMS400.NET** Web site.
3. Underneath the Web site, click **Asset Management** > **dmdata**.

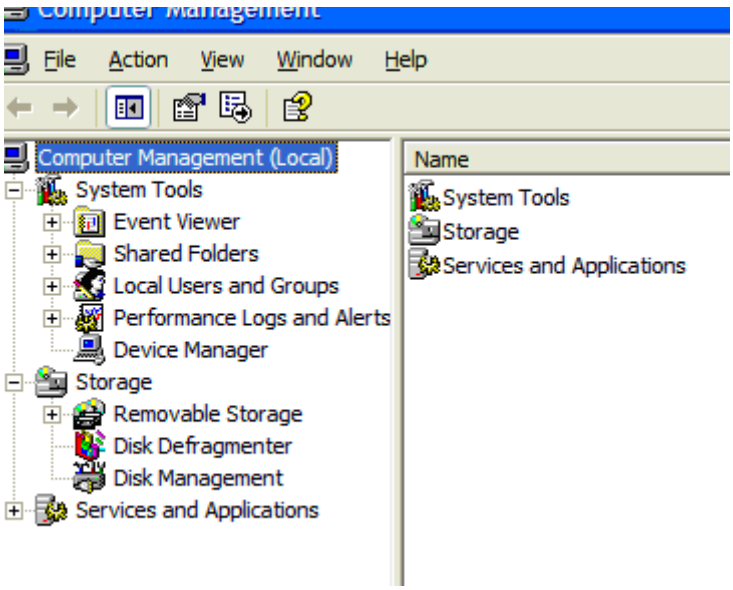


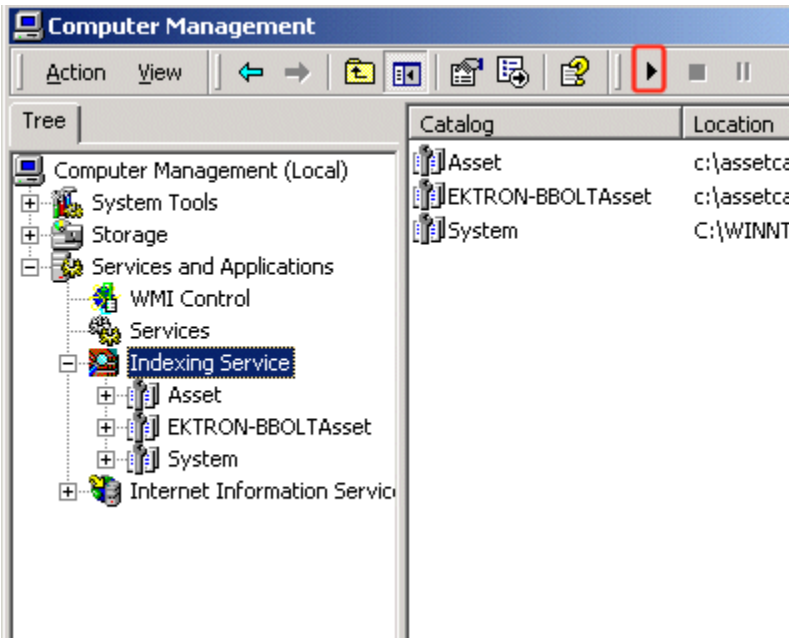
4. Right click **dmdata** and choose **Properties**.
5. Click the **Virtual Directory** tab.
6. Click the **Configuration** button.
7. Look in the **Wildcard Application Maps** area. If aspnet_isapi.dll appears, remove it.


Application Configuration
Mappings
Options
Debugging
Cache ISAPI extensions
Application extensions
Extens...
Executable Path
Verbs
.ad
C:\WINDOWS\Microsoft.NET\Framew...
GET,HEA..
.adprot...
C:\WINDOWS\Microsoft.NET\Framew...
GET,HEA..
.asa
C:\WINDOWS\system32\inetsrv\asp.dll
GET,HEA..
.asax
C:\WINDOWS\Microsoft.NET\Framew...
GET,HEA..
.ascx
C:\WINDOWS\Microsoft.NET\Framew...
GET,HEA..
Add...
Edit...
Remove
Wildcard application maps (order of implementation):
C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_isapi.dll
Edit...
Remove
Move Up
Move Down
OK
Cancel
Help

8. Click **OK**.

Turning on the Asset Indexing Service

Step	Screen
1. Click **Start > Control Panel > Administrative Tools > Computer Management**. The Computer Management screen appears.	
2. Click the plus sign (**+**) next to **Services and Applications**.	
3. Click **Indexing Service**.	

Step	Screen
4. Click the Start button to start the indexing service.	

Using Microsoft Windows Server 2003 as a Client (Web Folders Setup)

Symptom

You receive the following error message:

- Windows Server 2003 no longer ships MSDAIPP.DLL, thus connecting to an FPSE server through Webfolders, is no longer possible.

Resolution

Per MS Licensing, you can obtain webfldrs.msi from any down-level OS, or any Office product that shipped before Windows2003 (not Office 2003) and install the WebFolders client. Doing so will keep you compliant with licensing.

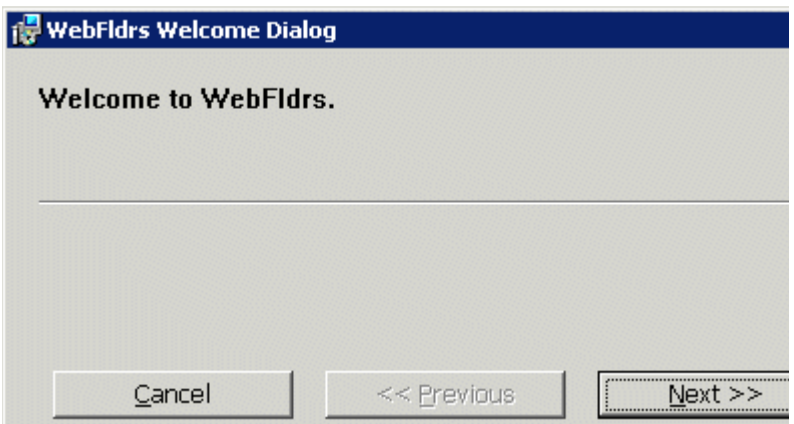
Installing WebFolders from Office 2003 is only allowed if you have an Office 2003 license for each Windows2003 server you plan to install WebFolders on.

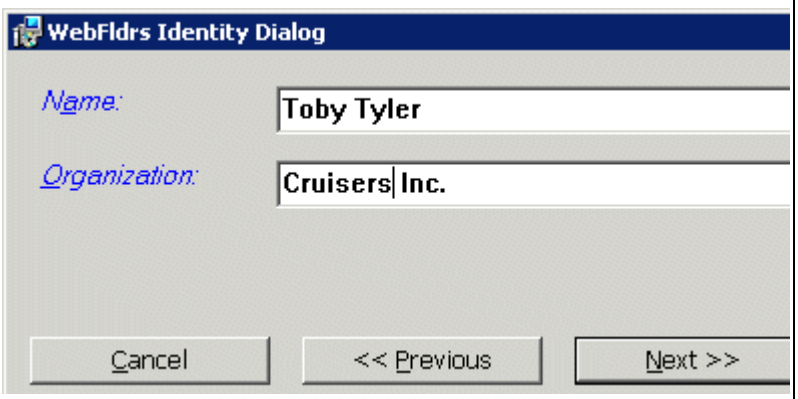
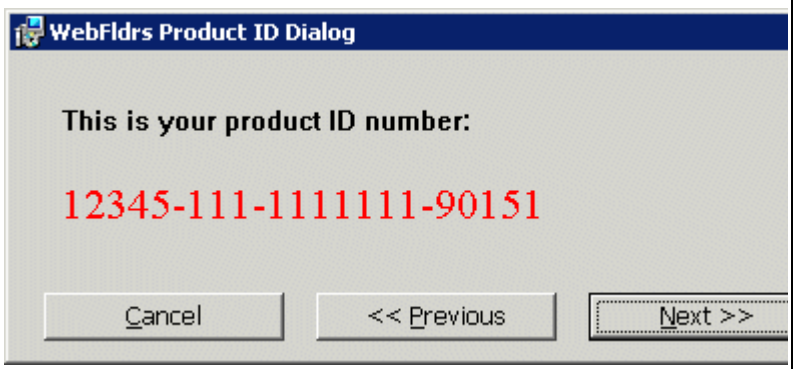
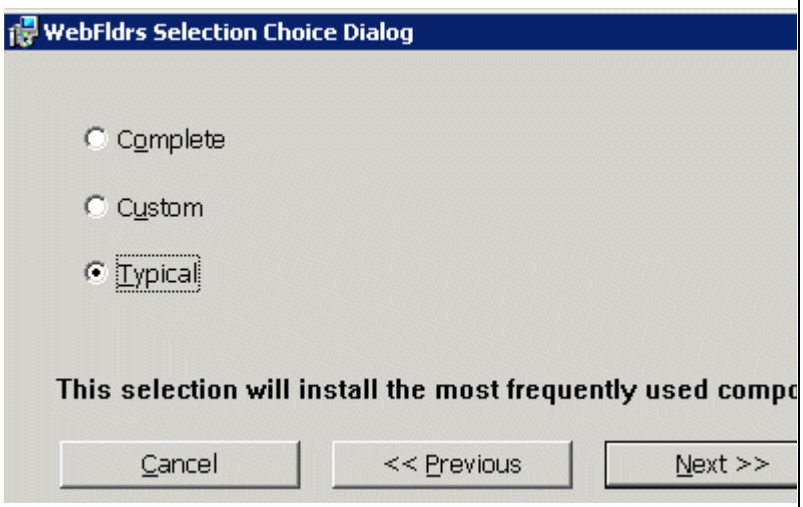
Web Folders Setup for Microsoft Windows Server 2003

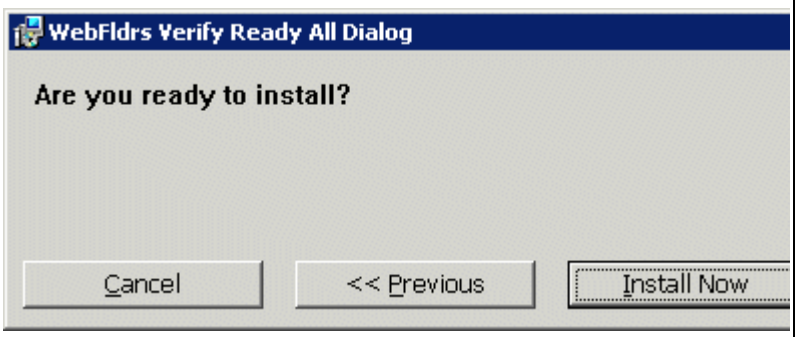
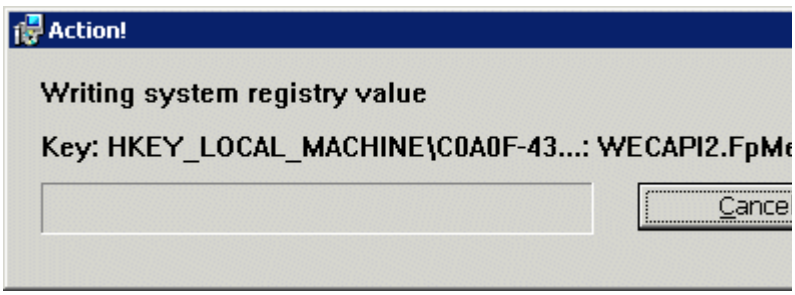
NOTE You only need to run the Web Folders Setup if there is a problem during the install. The **Ektron CMS400.NET** install performs the setup when needed.

The MSDAIPP.DLL is no longer shipped with Microsoft Windows Server 2003, making communication with Web folders impossible. To correct this, **Ektron CMS400.NET** setup runs the Web folder setup when it detects Microsoft Windows Server 2003.

The following steps explains installing Web Folders. You will need to obtain a copy of the webfldrs.msi file.

Step	Setup Screen
1. Double click the **webfldrs.msi** file.	
2. The Web Folders install screen appears. Click **Next** to continue.	

Step	Setup Screen
3. The Web Folders Identity dialog box appears. • Add your **Name**. • Add your **Organization**. • Click **Next**.	
4. The Web Folders Product ID dialog box appears. This dialog box displays the your product ID number. • Click **Next**.	
5. The Web Folders Selection Choice dialog box appears. • **Complete** - installs all components. • **Custom** - you choose the components to install. • **Typical** - installs the most frequently used components. After making a selection, click **Next**.	

Step	Setup Screen
6. The Verify Ready All dialog box appears. Click **Install Now**.	
7. The Action dialog box appears. The Setup is installing Web folders.	
8. The We Are Done dialog box appears. Click **OK**.	

ERRMSG: AssetManagement error: Failed to save asset

Symptom

After recently moving the ASM database to a new SQL server that has never hosted an ASM database, the following error appears while adding a DMS asset.

```
AssetManagement error: Failed to save asset. Internal Message: RAISERROR could not locate entry
for error 2000000002 in sysmessages. at Ektron.ASM.Documents.Asset.Create(enAssetStatus state)
at Ektron.ASM.Documents.AbstractAssetManagement.Create(AssetMetaData assetMetaData,
enAssetStatus state) at Ektron.ASM.PluginManager.PluginHandler.Create(AssetMetaData
assetMetaData, enAssetStatus state) at
AssetManagement.AssetManagementService.Create(AssetMetaData assetMetaData, enAssetStatus
state) at Mojave.AssetManagementProxy.Create(AssetMetaData assetMetaData, enAssetStatus state)
at Ektron.Cms.DataIO.EkContentRW.AddContentv2_0(Collection ContObj) at
Ektron.Cms.EkException.ThrowException(Exception ex) at
Ektron.Cms.DataIO.EkContentRW.AddContentv2_0(Collection ContObj) at
Ektron.Cms.Content.EkContent.AddNewContentv2_0(Collection ContObj)
```

Cause

During the creation of the ASM database, a total of 7 messages are written to the sysmessages table in SQL Server's master database. Each installation of SQL Server has its own master database and, in a typical move from one location to another, changes to the master database are not brought over.

If the ASM database was moved, and these messages are not in the sysmessages table in the new location's master table, the above error appears instead of a standard error message.

Resolution

Run this set of SQL scripts against your database. They add appropriate messages to the sysmessages table in the master database.

```
/
*****************************************************************************************
***/
sp_addmessage 2000000001, 10, N'Error in %s: Error %d inserting into %s. %s', US_ENGLISH,
FALSE, REPLACE
go

/
*****************************************************************************************
***/
sp_addmessage 2000000002, 10, N'Error in %s: Insert into %s returned %d rows. %s', US_ENGLISH,
FALSE, REPLACE
go

/
*****************************************************************************************
***/
sp_addmessage 2000000003, 10, N'Error in %s: Failed creating record because primary key already
exists. %s', US_ENGLISH, FALSE, REPLACE
go

/
*****************************************************************************************
***/
sp_addmessage 2000000004, 10, N'Error in %s: Error %d updating into %s. %s', US_ENGLISH, FALSE,
REPLACE
go
```

```
/
**********************************************************************************************
***/
sp_addmessage 2000000005, 10, N'Error in %s: Update into %s returned %d rows. %s', US_ENGLISH,
FALSE, REPLACE
go

/
**********************************************************************************************
***/
sp_addmessage 2000000007, 10, N'Error in %s: Error %d deleting into %s. %s', US_ENGLISH, FALSE,
REPLACE
go

/
**********************************************************************************************
***/
sp_addmessage 2000000008, 10, N'Error in %s: Delete into %s returned %d rows. %s', US_ENGLISH,
FALSE, REPLACE
go
```

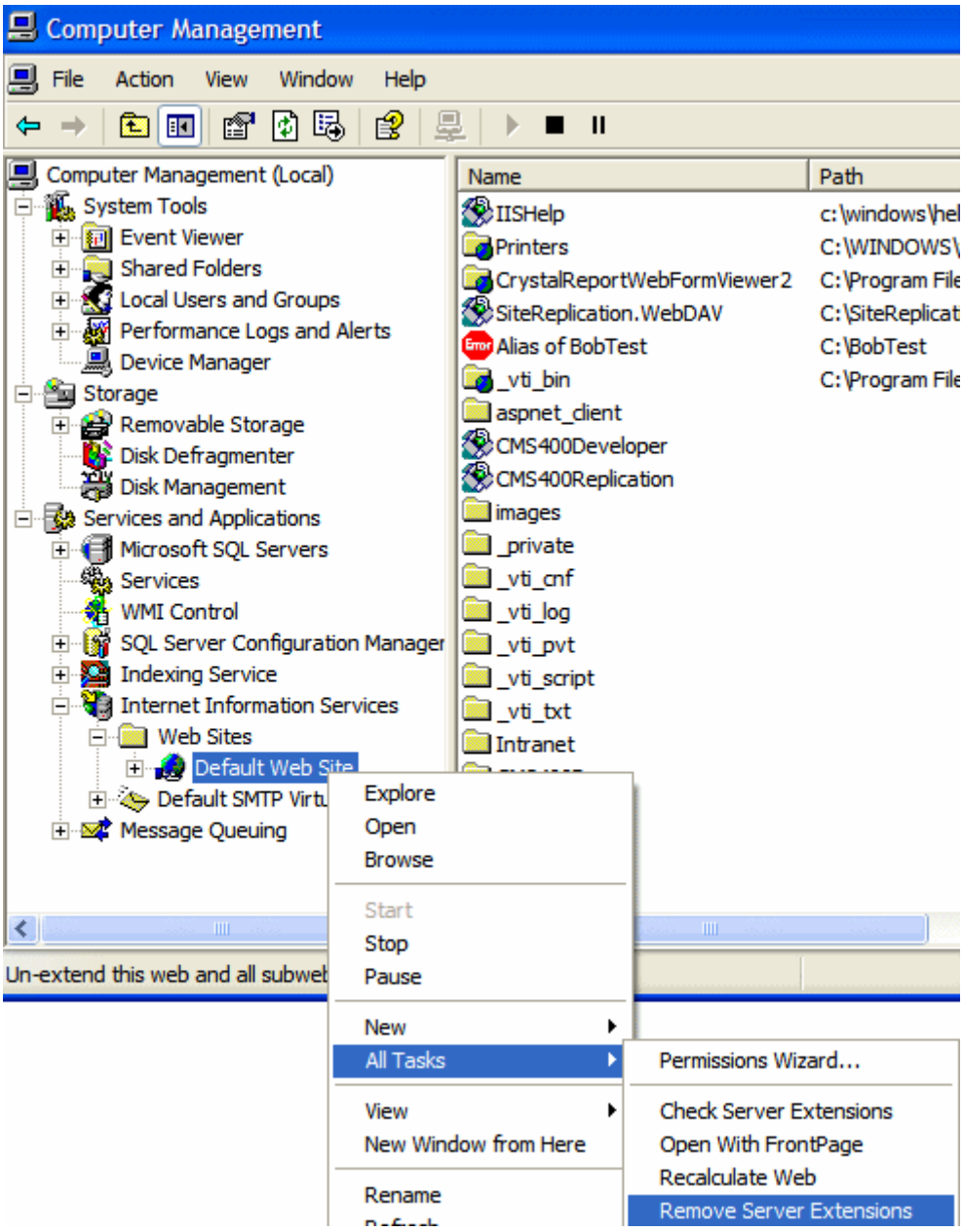
This snippet utilizes the sp_addmessage stored procedure from the master database, which adds the appropriate messages to the correct table.

NOTE Although it is possible to recode these as an INSERT statement that can run directly against the sysmessages table, that procedure is not recommended.

Removing Front Page Server Extensions

Follow these steps to remove FrontPage Server Extensions from the Web root. When you do, the extensions are also removed from all folders below that.

1. Click the Windows **Start** button.
2. Click **Control Panel > Administrative Tools > Computer Management**.
3. Open **Services and Applications > Internet Information Services > Web Sites > Default Web Site**.



4. Right click the mouse and select **All Tasks > Remove Server Extensions**.

Managing Tasks

NOTE Much of the Task functionality is documented in the **Ektron CMS400.NET** Users Manual section “Managing Tasks”. As an administrator, you should familiarize yourself with this information.

Tasks are typically assigned to content to help you monitor and manage changes to your Web site. Within Ektron CMS400.NET, users can assign tasks to themselves and other users. Tasks may include updating content, publishing content, updating an image and reordering a collection.

There are two kinds of tasks:

- Tasks not assigned to content
- Tasks assigned to content

A standard Ektron CMS400.NET user only sees tasks that are either assigned to or by himself. However, an administrator can view all tasks regardless of who they are assigned to or by.

This chapter explains how to access, manage, and assign tasks via the following topics:

- ”The Tasks Folder” on page 361
- ”Task Permissions” on page 361
- ”Task Categories and Types” on page 362
- ”Automatic Creation of Tasks Associated with Content” on page 371
- ”Task States” on page 379
- ”Task View Options” on page 382
- ”Email Notification” on page 385
- ”Archiving a Task” on page 386
- ”Deleting a Task” on page 387
- ”Purging a Task” on page 388

The Tasks Folder

The tasks folder in the Smart Desktop contains all tasks in the Web site.

Task Permissions

Assign task-related permissions on the screens indicated below.

Permission	Where assigned
Create task	Manage Members for Role: Task-Create
Redirect task (that is, assign to another user)	Manage Members for Role: Task-Redirect
Delete task	Manage Members for Role: Task-Delete

For more information about the screens listed above, see ”Using the Roles Screens” on page 796.

Task Categories and Types

Tasks can be assigned a Task Category, then a Task Type. This gives users an additional way to filter their tasks.

Task Categories and Task Types have a hierarchical relationship: the Task Category is the parent, and the Task Type is the child. So, several types can be assigned to each category.

Some examples of Task Categories might be Engineering, Sales, Documentation, or Web Design. Examples of Task Types might be Edit Content, Update Documents, or Contact Customer.

NOTE Only members of the Administrator User Group or users assigned the following roles can view, add, or edit task categories and types: Task-Create, Task-delete, Task-Redirect. *See Also:* ”Defining Roles” on page 795

You can create Task Categories and Task Types from these locations.

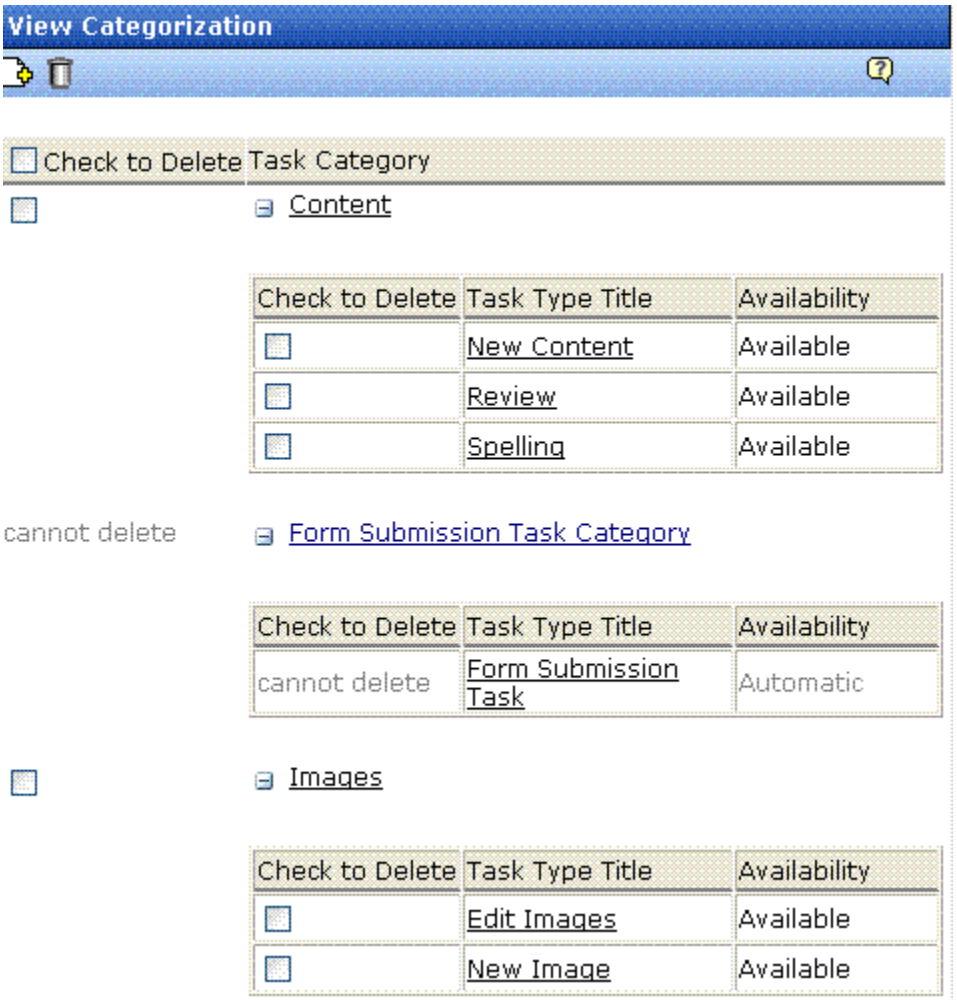
- When adding a task. *See Also:* **Ektron CMS400.NET** User Manual section “Managing Tasks” > “Creating a Task via the Task Folder” When editing a task.
- When working in the View Categorization screen.

View Categorization Screen

The View Categorization screen allows administrators to work with Task Categories and Task Types. From this screen you can create, edit, and delete them.

To access the View Categorization Screen, access the **Workarea** > **Settings** > **Configuration** > **Task Types**.

The following screen appears.

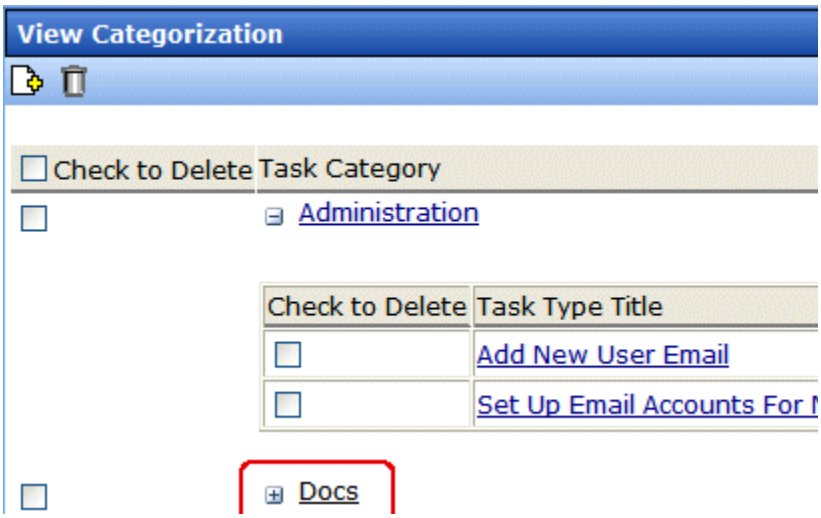


Viewing Task Categories

Note The View Categorization screen has a system-defined category (Form Submission Task) that can only be used with forms. You can change its name but cannot delete it. For more information, seethe Forms chapter of the Ektron CMS400.NET User Manual.

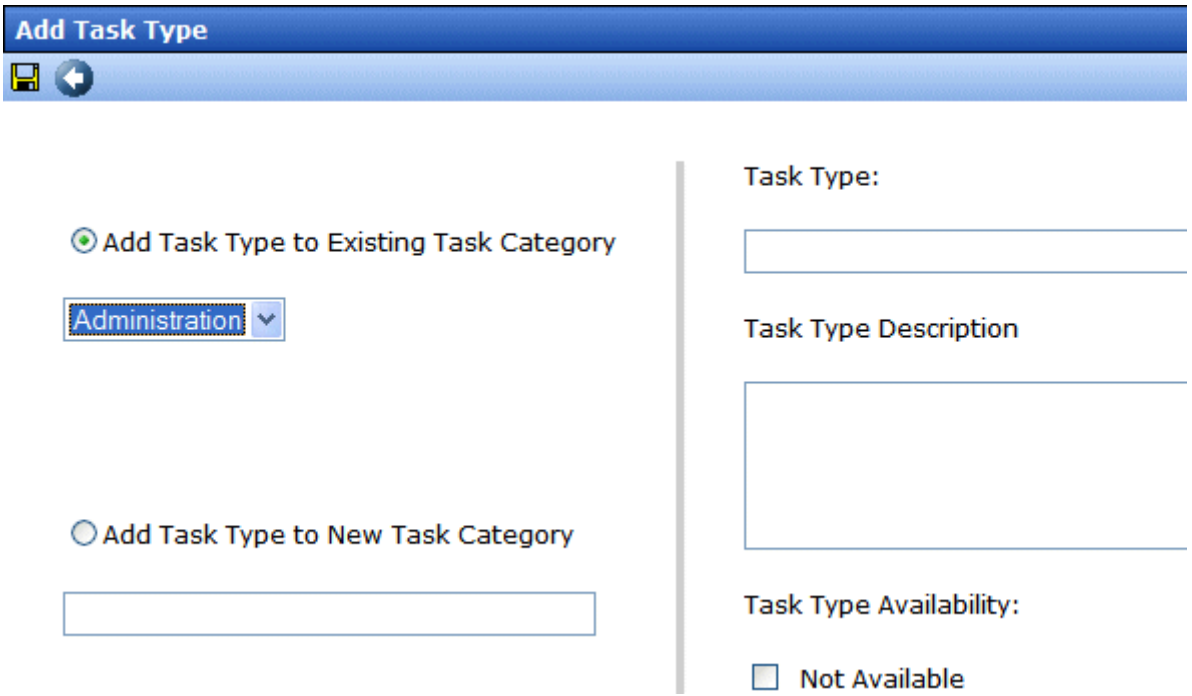
While in the View Categorization screen, you can collapse and expand Task Categories. To collapse a Task Category, click the (⊟) button next to the Task Category name. To expand one, click the (⊞) button next to the Task Category name.

The following example shows the View Categorization screen with one Task Category minimized.



Creating Task Categories and Task Types

From the View Categorization screen, you can create Task Categories and Task Types by clicking the Add Task button ( ). When you do, the following screen appears.



From this screen, you can perform these tasks.

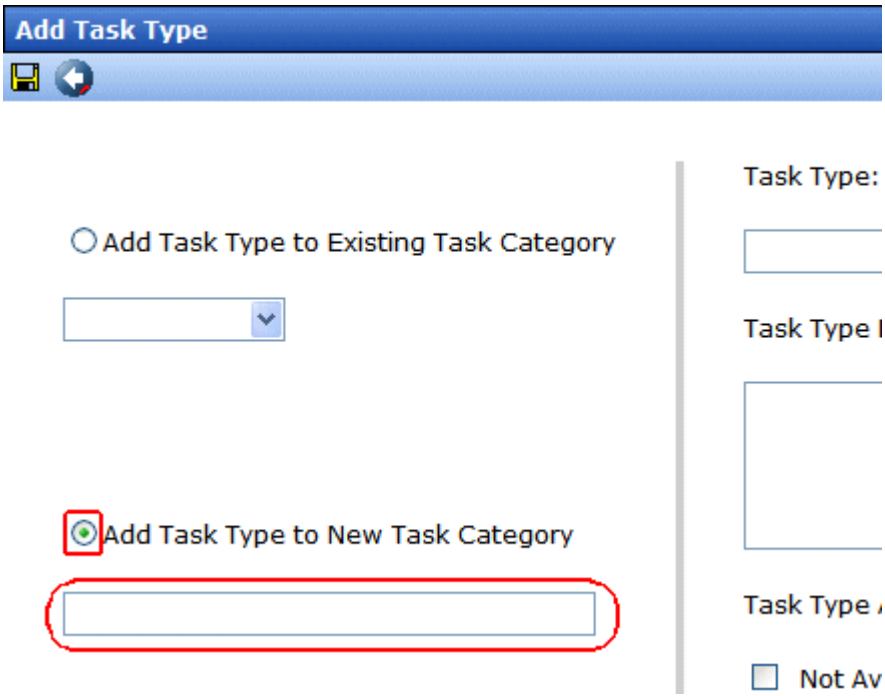
- "Adding a New Task Category and Task Type" on page 365
- "Adding a New Task Type to an Existing Task Category" on page 366
- "Editing Task Category" on page 367
- "Editing a Task Type" on page 368
- "Task Type Availability" on page 369

Adding a New Task Category and Task Type

To add new Task Category and Task Type, follow these steps.

1. Click the **Add Task Type** button ( ).
2. The Add Task Type Screen appears.

3. Click the **Add Task Type to New Task Category** radio button or in the text box.
4. Enter a name in the **New Task Category** field.



5. Add a Task Type name in the **Task Type** field.
6. Enter a **Task Type Description**.
7. Choose a Task Type Availability. *See Also:* "Task Type Availability" on page 369
8. Click **Save** ( ).
9. Your new Task Categories and Task Types appear on the View Categorization screen.

Adding a New Task Type to an Existing Task Category

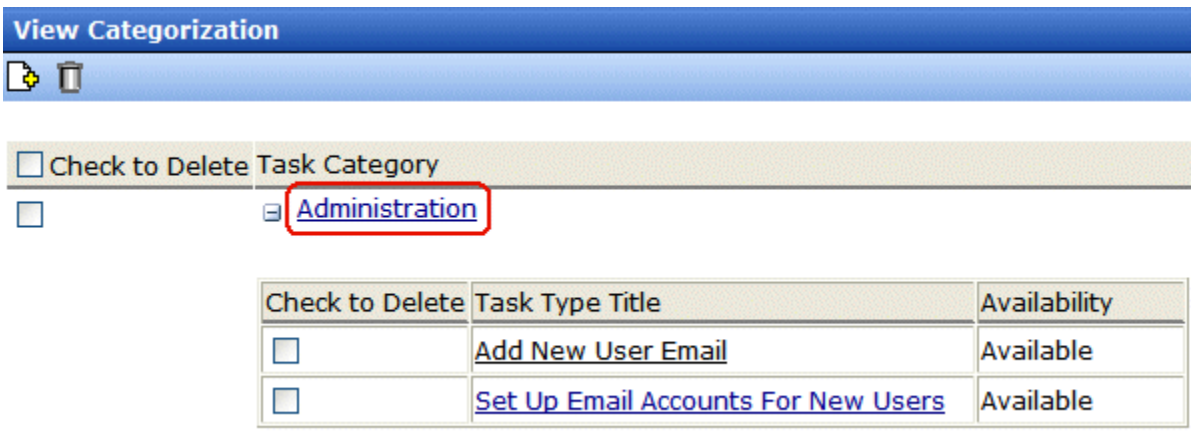
To add a new Task Type to an existing Task Category, follow these steps.

1. Click the **Add Task Type** button ( )
2. The Add Task Type Screen appears.

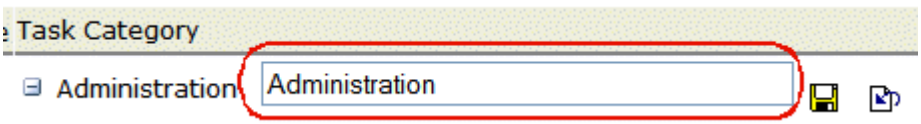
3. Click the **Add Task Type to New Task Category** radio button or click the drop down box.
4. Choose a category from the drop down box.
5. Add a Task Type name in the **Task Type** field.
6. Enter a **Task Type Description**.
7. Choose a Task Type Availability. *See Also:* "Task Type Availability" on page 369
8. Click **Save** ( ).
9. Your new Task Categories and Task Types appear on the View Categorization screen.

Editing Task Category

You can edit a Task Category names. To edit a Task Category, click the Task Category link.



A text box screen appears next to the category name. Use the text box to change the name.



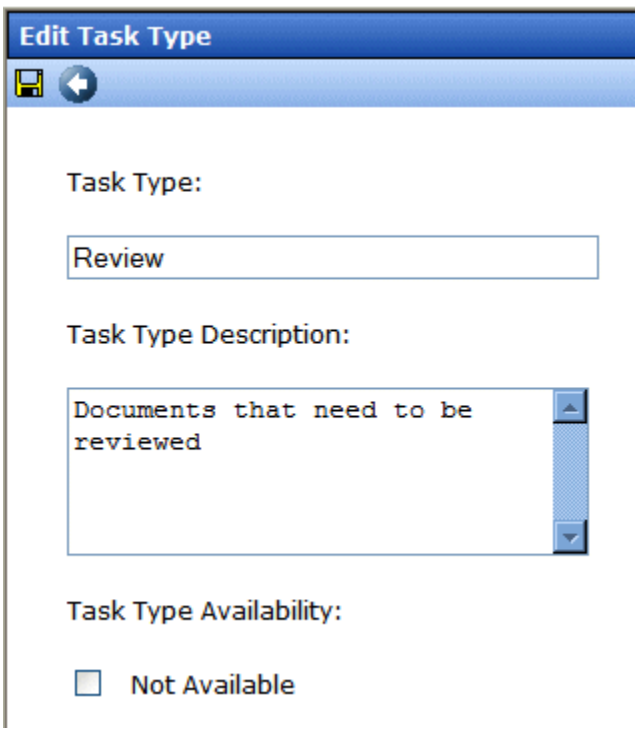
You can either save ( ) the changes, or cancel ( ) the edit.

Editing a Task Type

From the View Categorization screen, you can edit a Task Type. This allows you to change the Task Type name, Task Type description, and Task Type availability.

To edit a Task Type, follow these steps.

1. On the View Categorization screen, click a Task Type.
2. The Edit Task Type screen appears.



From this screen you can edit the following:

- Task Type
- Task Type Description

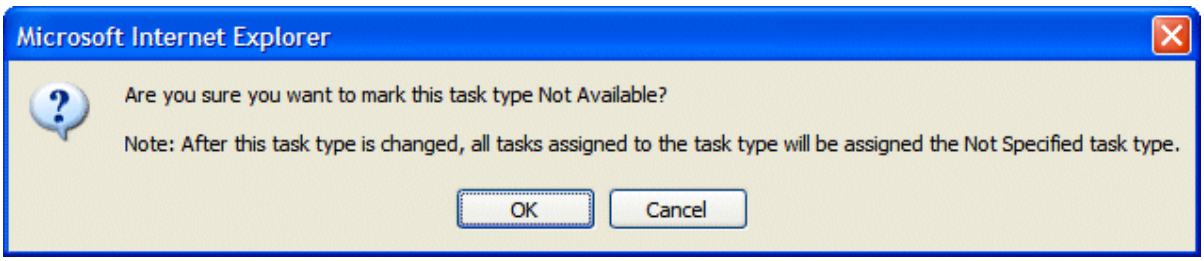
- Task Type Availability. *See Also:* "Task Type Availability" on page 369

3. Edit the information.
4. Click Save ( ).
5. The Task Type information is changed.

Task Type Availability

Task Types can be hidden from users by clicking the Not Available check box in the Add Task Type and Edit Task Type screens. By making a Task Type not available, you can suppress without deleting it.

When you make a Task Type not available, you see the following warning.


Microsoft Internet Explorer
Are you sure you want to mark this task type Not Available?
Note: After this task type is changed, all tasks assigned to the task type will be assigned the Not Specified task type.
OK
Cancel

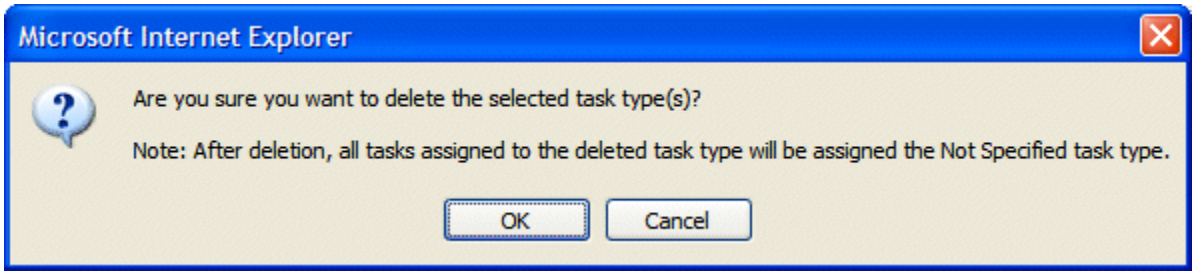
After you make a Task Type not available, the assigned tasks' Type and Category are changed to **Not Specified**.

Deleting Task Categories and Task Types

You can delete Task Types by Task Category or individually.

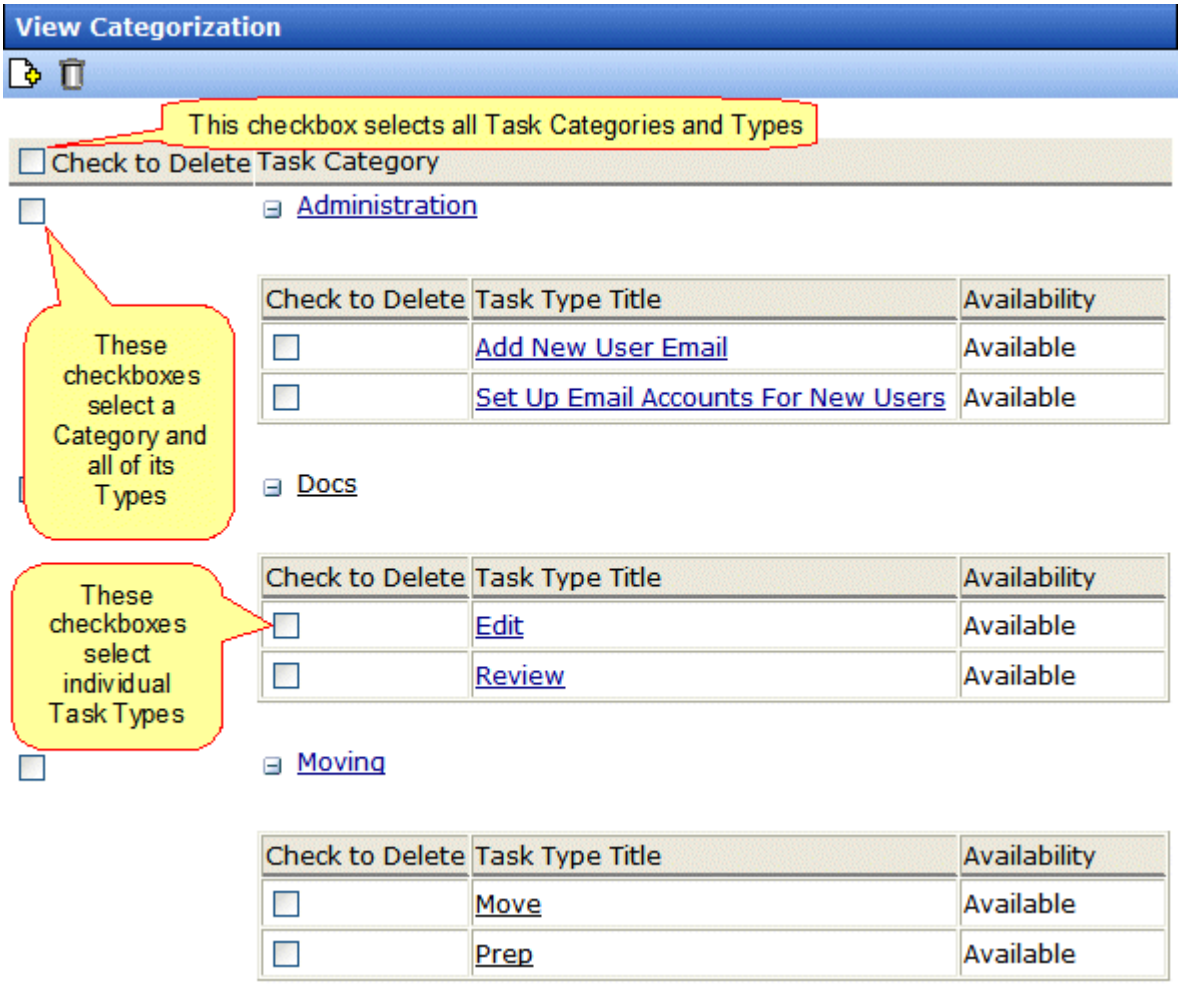
To delete a Task Type, click the check box next to the Task Type, then click the Delete ( ) button.

When you delete a Task Type, the following appears.


Microsoft Internet Explorer
Are you sure you want to delete the selected task type(s)?
Note: After deletion, all tasks assigned to the deleted task type will be assigned the Not Specified task type.
OK
Cancel

To delete all Task Types, check the **Delete all** check box.

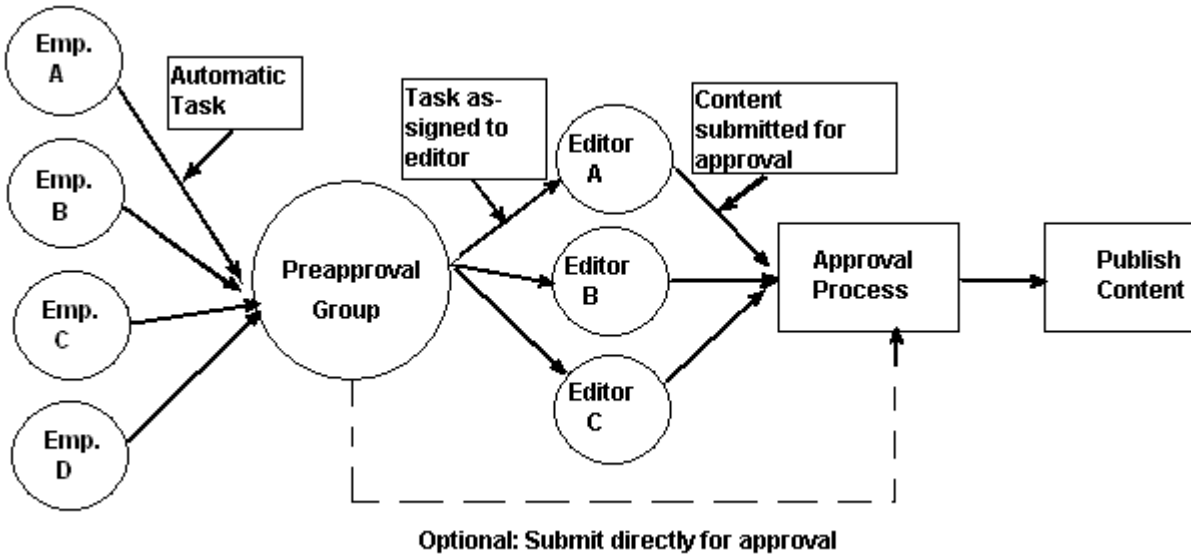
The following example shows which check boxes on the screen are associated with All Task Types, Task Categories, and individual Task Types.



Automatic Creation of Tasks Associated with Content

In addition to the manual assignment of tasks, they can be automatically generated whenever content, an asset, or a form is created. You would enable and use the Automatic Task Creation feature if you want to set up a *preapproval* process, which requires one or more users to review and approve content before it enters the regular approval process. (The regular approval process is described in "Setting Approval Chains" on page 786.)

The most common scenario illustrated below.



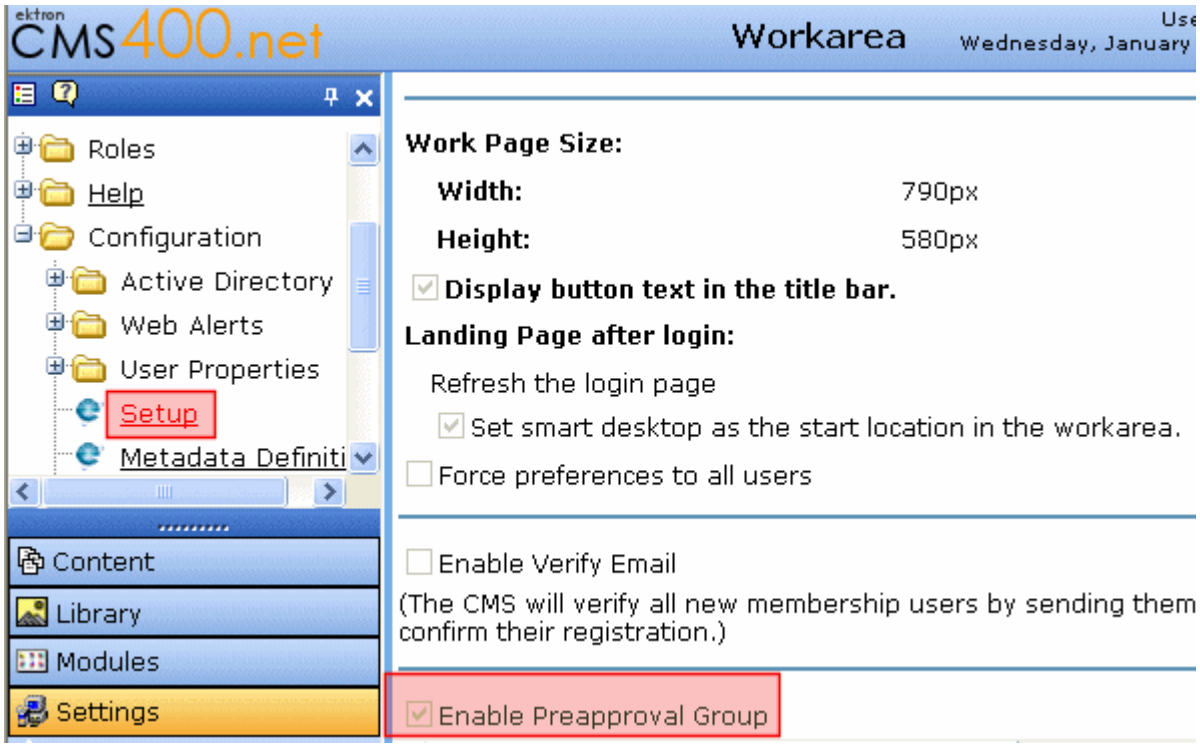
In this example, an automatically-generated task assigns the content to a preapproval group. When any member of that group reviews his tasks, he inspects the corresponding content and assigns it to an editor. After the editor reviews and possibly edits the content and submits it for approval, it enters the normal approval process.

This section explains the automatic task creation process through the following subtopics:

- ”Enabling Automatic Task Creation” on page 372
- ”Assigning a Preapproval Group to a Folder” on page 373
- ”How Automatic Task Creation Works” on page 375

Enabling Automatic Task Creation

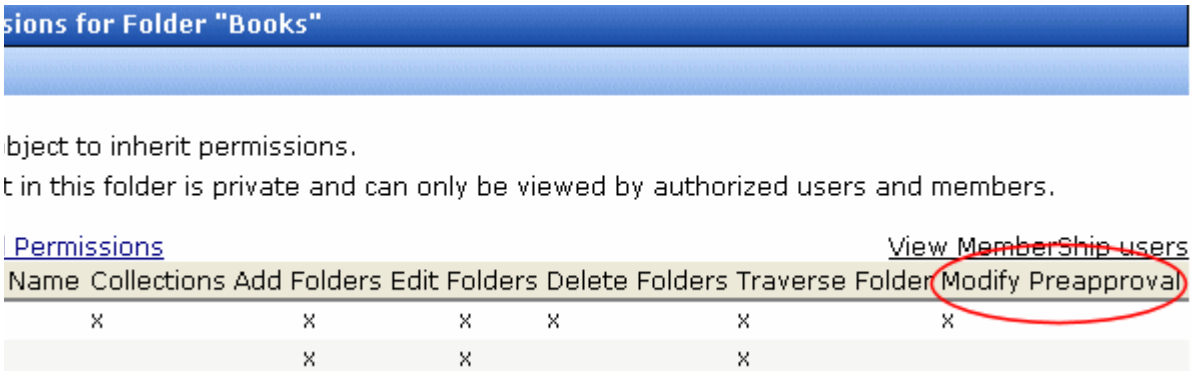
The Settings > Configuration > Application Setup screen’s **Enable PreApproval Group** field controls **Ektron CMS400.NET**’s Automatic Task feature. Check this box to turn Automatic Tasks on.



Next, you create user groups and assign them to folders whose content must complete the preapproval process before it enters the regular approval process. See "Managing User Groups" on page 731 and "Assigning a Preapproval Group to a Folder" on page 373.

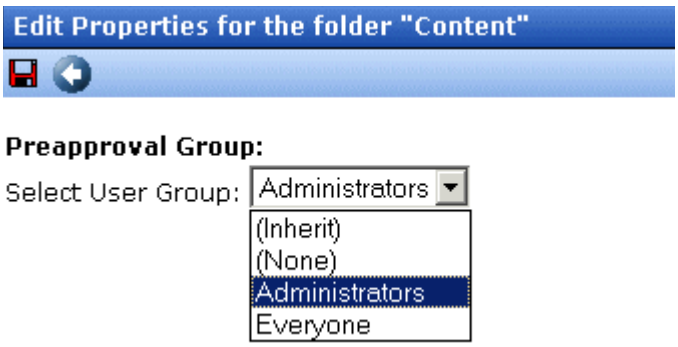
Assigning a Preapproval Group to a Folder

The ability to select or update a folder's preapproval group is determined by the advanced permission **Modify Preapproval**. Only users with this permission can see the Modify Preapproval button ( ) when viewing the Folder Properties screen. *See Also:* "Standard & Advanced Permissions" on page 778


sions for Folder "Books"
bject to inherit permissions.
t in this folder is private and can only be viewed by authorized users and members.
Permissions
View MemberShip users
Name Collections Add Folders Edit Folders Delete Folders Traverse Folder Modify Preapproval

If you have permission to modify a folder's preapproval group, go to the Folder Properties screen and click the Modify Preapproval button ( ) to access the **PreApproval Group** field. (The field only appears if you have enabled the Preapproval Feature. See "Enabling Automatic Task Creation" on page 372.)

If you assign a user group, an automatic task can be assigned to that group whenever content in that folder is created or updated.



If you select **Inherit**, this folder gets its preapproval group from the parent folder. If you select **None**, you disable the preapproval feature for the folder.

Preapproval Groups Report

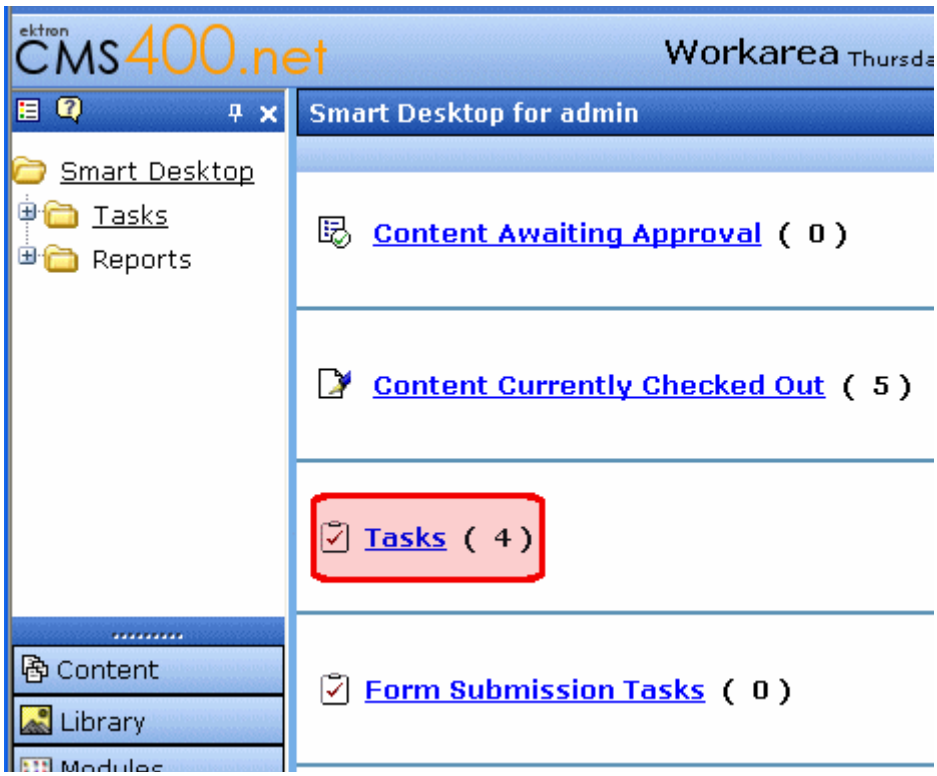
The Preapproval Groups Report lists all preapproval groups assigned to folders within **Ektron CMS400.NET**. To access it, go to **Smart Desktop** > **Reports** > **Preapproval Groups**. *See Also:* **Ektron CMS400.NET** User Manual > "The Workarea and Smart Desktop" > "Understanding the Smart Desktop."

Folder	Folder ID	Preapproval Group	Group ID
Content	0	Administrators	1

How Automatic Task Creation Works

When a user submits a content item for approval, **Ektron CMS400.NET** checks to see if an open task exists for it. (An open task is one whose state is Not Started, Active, Awaiting Data, on Hold, or Pending.) If none exists and a preapproval group is assigned to its folder, a task is created and associated with the content.

At this point, all members of the folder's preapproval group see the task on their Smart Desktop.



A task has the following information.

.

Field	Value
Title	A string formulated by joining the • content title • content ID number • underscore • Task For example, Private Content2_Task
Assigned to	The preapproval group
Assigned by	The user who submitted the content

Field	Value
Content	The content being submitted for approval
Priority	Normal
State	Not Started
Due date	none
Start date	none
Created by	User who submitted content
Description	none

Next, the task can be reviewed by any member of the preapproval group. The member then has two choices.

- review the content and submit it for publishing. This action completes the preapproval process and submits the content into the regular approval chain.
- assign the task to another user, such as an editor. (The user to whom the task is being assigned must have permission to edit the content.) The editor reviews the content, updates it as needed, and submits it into the regular approval chain.

NOTE The user submitting the content does not need permission to create tasks. Also, the user assigned to the task should not change its state using the task system. Instead, he should review and approve content using the regular content workflow mechanism. That mechanism automatically changes the task's state.

The tables below explain the sequence of changes to content and its associated task. All changes are logged into the task's history. *See Also:* **Ektron CMS400.NET** User Manual > "Managing Tasks" > "Viewing a Task's History"

Also, email is automatically generated for automatic tasks as it is for manually-created tasks. *See Also:* "Email Notification" on page 385

Sequence of Task/Content Statuses (Author Lacks Permission to Approve Content)

Event	Content Status	Task Status
Content is created and checked in	Checked In	No auto task assigned
Content is submitted for approval Note: The above action creates the automatic task for the content.	Waiting for completion of associated tasks	Not Started
Content is assigned by a member or preapproval group to an editor	Waiting for completion of associated tasks	Not Started
Editor updates content then checks it in	Checked In	Active
Content is submitted for approval; it enters any approval chain set for the folder Note: Since the task requires an approval, it appears in the task list of the current approver. When the content is approved, the task is moved to the next approver's task list.	Submitted for Approval	Pending
Approver denies request	Checked In	Reopened
Approver approves content	Approved	Complete

Sequence of Task/Content Statuses (Author Can Approve Content)

Event	Content Status	Task Status
Content is created then checked in	Checked In	No auto task assigned
Content is edited then checked in	Checked In	Active
Content is submitted for approval Note: Although an author can approve content, he must click publish twice: once to change content status to Awaiting Completion of Associated Task, and a second time to change it to Approved.	Waiting for completion of associated tasks	Not Started
Content is published	Approved	Complete

Task States

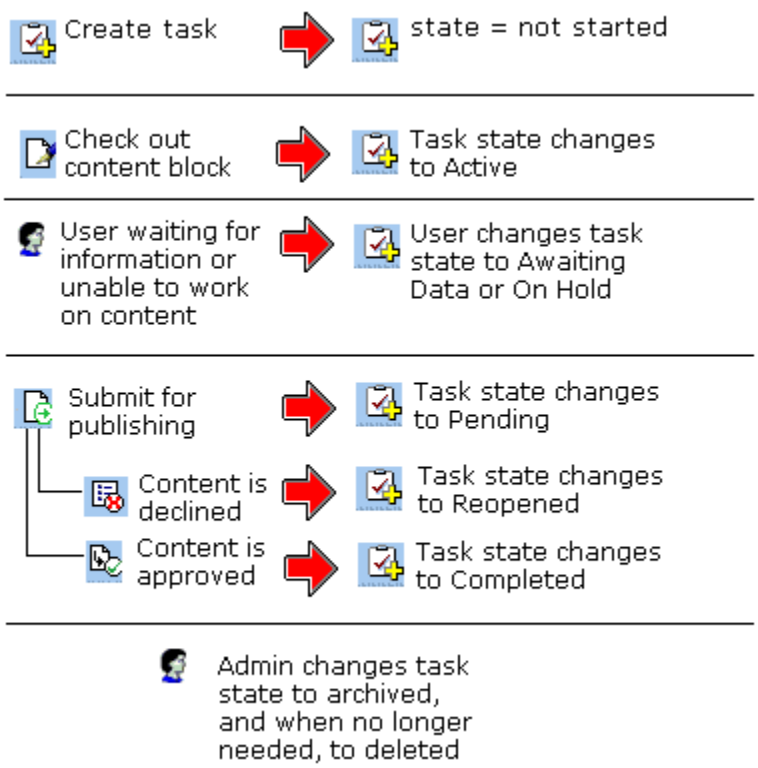
During the life of a task assigned to content, it normally progresses through a series of states. The state helps track a task's progress from creation to completion and even removal from the database. When reviewing the history of a task, the state can be used to review which actions changed the task's state by whom and when.

User-Assigned versus System-Assigned States

Some states can only be assigned by users while others are only assigned when an event occurs to the associated content. For example, when content is first submitted for approval, the associated task's state changes to Not Started.

IMPORTANT! The administrator user can always change a task's state to any other state.

The following graphic illustrates the sequence of user and system actions that change a task's state.


Create task
state = not started
Check out content block
Task state changes to Active
User waiting for information or unable to work on content
User changes task state to Awaiting Data or On Hold
Submit for publishing
Task state changes to Pending
Content is declined
Task state changes to Reopened
Content is approved
Task state changes to Completed
Admin changes task state to archived, and when no longer needed, to deleted

Progression of Task States

State	Description	Assigned by
Not Started	Assigned when task is created.	User
Active	The task's content is checked out.	System
Awaiting Data	The task is started but the assigned-to user is awaiting data from an external source. You can use comments to indicate the data being waited for.	User
On Hold	Task cannot be worked on at this time.	User

State	Description	Assigned by
Pending	The content is submitted for approval. A task remains pending while its content is in the approval process. When the last person in the approval chain approves the content, the task's state changes to Completed. If any approver declines the content, the task's state changes to Reopened. If an editor edits the content and then checks it back in, the task's state changes to Reopened.	System
Reopened	Content is declined by an approver in the approval process. Also, if someone edits content whose task state is pending, the tasks's state changes to Reopened.	System
Completed	The last user in the approval chain approves the content and it is being published.	System
Archived	After a task is completed, administrators can assign this state. It no longer appears on open task lists but is kept for reviews and reports. Only the administrator can view Archived tasks. *See Also:* "Archiving a Task" on page 386	User
Deleted	When an archived task is no longer needed for reporting or reviewing, administrators can assign this state. While in this state, the task remains in the database. *See Also:* "Deleting a Task" on page 387 When you purge the task, it and all of its transactions are removed from the database. *See Also:* "Purging a Task" on page 388	User (user with delete permission can delete; only admin and user with Task-Delete role can purge)

Restrictions on the Task Flow Process

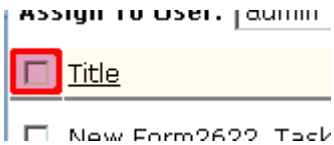
- Only users with archive and delete permissions can set a task's status to archived or deleted. This can be done at any stage of the task flow process.
- Notes can be entered for the task at any time.

- An administrator can assign a task to any state at any time.

Task View Options

Beneath the main task module folder, 14 view screens display all tasks filtered by specified categories. The categories appear in "The Tasks Folder" on page 361.

After viewing tasks in any category, most screens let you perform an action on the tasks (the actions are included in the table below). For example, you can redirect your tasks to another user. To select all tasks on a screen, click the check box in the header row (illustrated below).



Folder	Displays these tasks	Action you can perform from view screen
Tasks	Open tasks assigned to yourself, and open tasks you have assigned to other users.	• Create a new task • Delete a task • View a task • Sort tasks by column
All Open Tasks	All open tasks (that is, tasks in one of these states) for all users • not started • active • awaiting data • on hold • reopened • pending	• Edit a task • Sort tasks by column

Folder	Displays these tasks	Action you can perform from view screen
Assigned To Me	All open tasks assigned to you	• Assign tasks to a different user • View a task • Sort tasks by column
Assigned By Me	All open tasks you assigned to yourself or others	• Assign tasks to a different user • View a task • Sort tasks by column
Created by Me	All open tasks you created	• View a task • Sort tasks by column
Assigned to User	All open tasks assigned to a user you select	• Select any user and view all tasks assigned to that user. To do so, select new user from **Assign to User** drop down list and click **Get Tasks**. • View a task • Sort tasks by column
Not Started	All whose state is Not Started *See Also:* "Task States" on page 379	• Change to any other state • View a task • Sort tasks by column
Active	All whose state is Active	• Change to any other state • View a task • Sort tasks by column
Awaiting Data	All whose state is Awaiting Data	• Change to any other state • View a task • Sort tasks by column
On Hold	All whose state is On Hold	• Change to any other state • View a task • Sort tasks by column

Folder	Displays these tasks	Action you can perform from view screen
Pending	All whose state is Pending	• Change to any other state • View a task • Sort tasks by column
Reopened	All whose state is Reopened	• Change to any other state • View a task • Sort tasks by column
Completed	All whose state is Completed	• Change to any other state • View a task • Sort tasks by column
Archived	All whose state is Archived	• Change to any other state • View a task • Sort tasks by column
Deleted	All whose state is Deleted	• Change to any other state • Purge tasks • View a task • Sort tasks by column

Determining Which Tasks a User Can View

To provide security, **Ektron CMS400.NET** restricts which users can use the task views. These restrictions are listed on the following table.

View option	Administrator group member	User or group to whom task assigned	User who assigned task	User who created task	All users
All Open *	**X**				
Assigned by Me		**X**	**X**		

View option	Administrator group member	User or group to whom task assigned	User who assigned task	User who created task	All users
Assigned to Me *		X			
Created by Me *				X	
Assigned to User	X	X	X	X	X
Not Started	all tasks in specified state	only tasks assigned to user in specified state			
Active					
Awaiting data					
On hold					
Pending					
Reopened					
Completed		v			
Archived					
Deleted	v				

* - user can only view open tasks, that is, not started, active, awaiting data, on hold, pending, or reopened

Email Notification

email notification is sent on these occasions.

IMPORTANT! For email notifications to be sent, the following items must be true:
- Users have email enabled in their user profile.
- Users have a valid email address in their user profile.
- CMS400.NET is set up and configured to send emails.

- A task is assigned to a user.
- A task is redirected to a user.
- A task is submitted for content approval. Sent to the first user in the approval chain.
- The approval process moves on to the next approver.
- The content is declined at an approval stage. This is sent to the assigned user.
- The content is published. This goes to the creator, assigned user, and the approvers.

See Also: “Configuring E-Mail Notifications” in the **Ektron CMS400.NET** Setup Manual

Archiving a Task

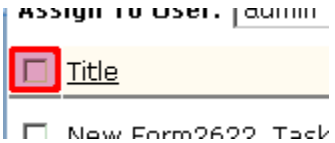
After a task is completed, you may want to change its state to Archived. Archiving moves selected tasks from the Completed tasks list to the archived list. This change cleans up the completed tasks list and makes it and easier to use.

Archived tasks are typically kept for a predetermined time period, at which point an administrator deletes them (depending on your organization’s policies).

To archive a task, follow these steps.

1. From the Smart Desktop, open the Tasks folder.
2. Click the view option corresponding to the state of tasks you want to archive. Typically, you would archive completed tasks.

3. A list of Completed tasks appears. Select tasks one at a time, or click the check box on the top left corner to select all.



4. Next to the **Change to State** field, click the down arrow to display the drop down list and select **Archived**.
5. Click the Set button.

Deleting a Task

You can easily delete tasks no longer needed on the Web site. Although an administrator can change a task's state to deleted at any time, you typically do so after it is completed or archived, depending on your organization's policies.

Note that a deleted task remains in the system until you purge it. It is only visible on the View Deleted Tasks option. *See Also:* ”Deleted” on page 381.

Tasks can be deleted either one at a time, or several at once.

To delete tasks, follow these steps.

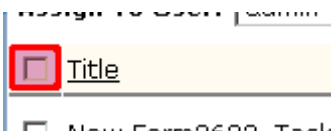
1. From the Smart Desktop, click the **Tasks** folder.
2. Click the view option corresponding to the state of tasks you want to delete. Typically, you would delete archived tasks.
3. Select tasks one at a time, or click the check box on the top left corner to select all.
4. Next to the **Change to State** field, click the down arrow to display the drop down list and select **Deleted**.
5. Click the Set button.

Purging a Task

If you want to remove deleted tasks from the system, you purge them. Upon purging, a task and its history are removed from the database.

To purge one or more tasks, follow these steps.

1. From the Smart Desktop, click the Tasks folder.
2. Click the **Deleted** view option.
3. Select tasks one at a time, or click the check box on the top left corner to select all.



4. Click the Purge button.

Searching Your Web Site

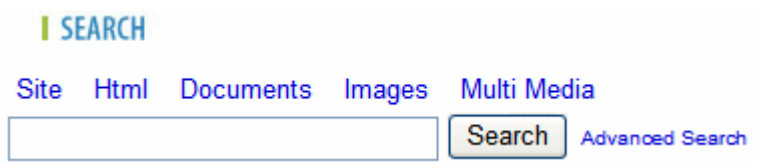
NOTE This chapter describes the operation of the Web Search server control, which was introduced by the 7.0 Release. To learn about the operation of the Search server control (the search available prior to 7.0), see http://www.ektron.com/manuals/cms400/v61/useradmin/search.62.1.html.

NOTE This chapter only describes searching HTML content. To learn about searching XML Smart Form content, see "XML Indexing" on page 203.

Ektron CMS400.NET provides two kinds of searches:

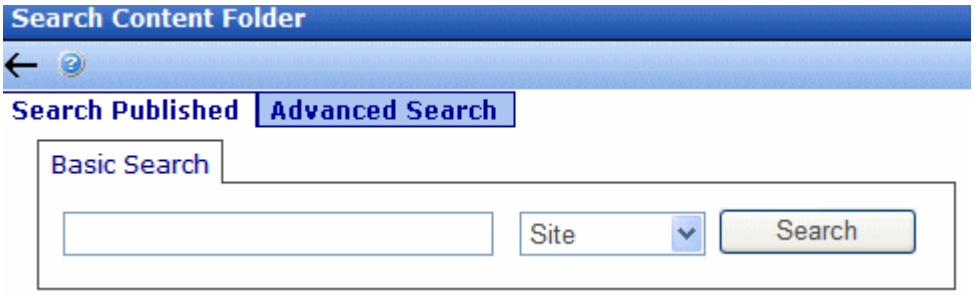
- the *Web site search* helps site visitors find published content on your Web site.

  Your Web developer determines where to place the Web site search. The **Ektron CMS400.NET** sample site provides a link to it from every page. When a site visitor clicks the link, he sees the search screen.



  For more information, see "Web Site Search" on page 391.

- the *Workarea search* helps anyone signed into **Ektron CMS400.NET** to find content. To access the Workarea search, go to the folder whose content you want to search and click **Action > Search**. The following screen appears.



The left tab lets you access the default version of the Web site search, while the right tab lets you search content by properties (title, comments, creation date, status, etc.).

To learn more about the Workarea search, see the **Ektron CMS400.NET** User Manual section “Searching the Workarea.”

The Web site search is more fully explained through the following topics.

- ”Web Site Search” on page 391
- ”The Catalog and Index Files” on page 391
- ”Basic versus Advanced Web Site Search” on page 406
- ”Display of Search Results” on page 412
- ”Synonym Sets and Suggested Results” on page 416
- ”Using the Integrated Search” on page 434
- ”Setting up a Multiple Site Search Using Virtual Directories” on page 441
- ”Searching for Metadata” on page 445
- ”Installing the Visio IFilter” on page 445
- ”Query Language” on page 446
- ”Search Troubleshooting” on page 458

NOTE For information about inserting the Web Search server control into an Ektron CMS400.NET Web template, see the Ektron CMS400.NET Developer Manual.

Web Site Search

Ektron CMS400.NET's Web site search provides extremely fast results without impacting the load on your database. To accomplish these goals, **Ektron CMS400.NET** stores a separate copy of all published content in local index files (also known as a catalog). The Microsoft Windows Indexing service constantly indexes the catalog so that search results are returned with lightning speed.

NOTE Actually, two catalogs are created: one for public content, and another for private content.

Another advantage of the indexing service is its robust query language. Site visitors can use it to find Web site content by combining a rich collection of search criteria, including

- boolean and proximity operators
- wildcards
- free text queries
- vector space queries
- property value queries

These are explained in "Query Language" on page 446.

A third benefit of this architecture is scalability. If the amount of content or number of hits begins to affect performance, you can move the catalog to a separate server to handle the increased workload.

The Catalog and Index Files

NOTE Be sure that your Web server is running Indexing Service 3.0. Earlier versions of the service do not work properly.

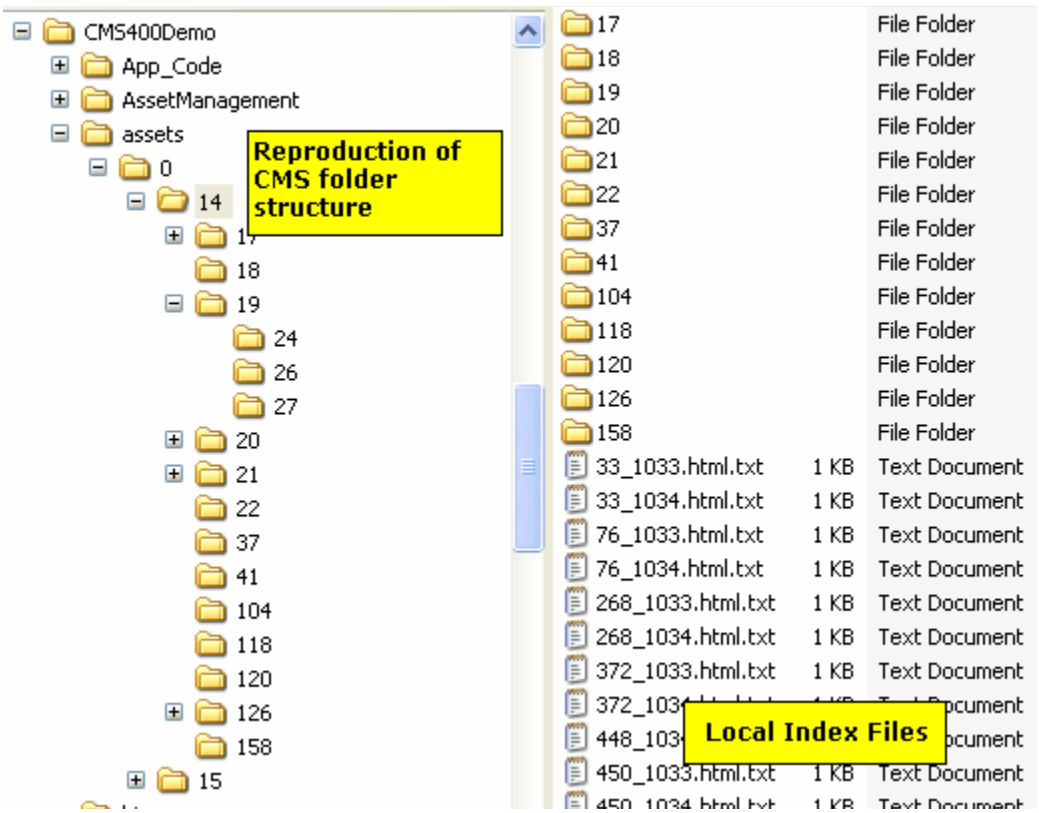
The Microsoft Windows Indexing Service uses catalogs to index **Ektron CMS400.NET** content. The catalogs read copies of content that are saved to the local file system whenever they are published.

This section explains the following topics about working with the Indexing Service and catalogs.

- ”Local Index Files” on page 392
- ”The Catalogs” on page 393
- ”Recreating a Catalog” on page 395
- ”Restarting the Indexing Service” on page 402

Local Index Files

A separate copy of all published content is maintained in local index files (whose extension is .txt), which are stored in the *siteroot*/assets folder. Within that folder is a reproduction of the CMS folder structure. However, it uses the folder ID number, not name, to represent folders. The following graphic illustrates this structure.



Notice that each content item is saved as a .txt file for indexing. The file name is derived from the content item’s

- ID number
- underscore (_)
- language ID
- file extension (content items have an .html extension)
- .txt file extension

The Catalogs

Ektron CMS400.NET stores a copy of all published content in two catalogs that can be queried. Their default names are below.

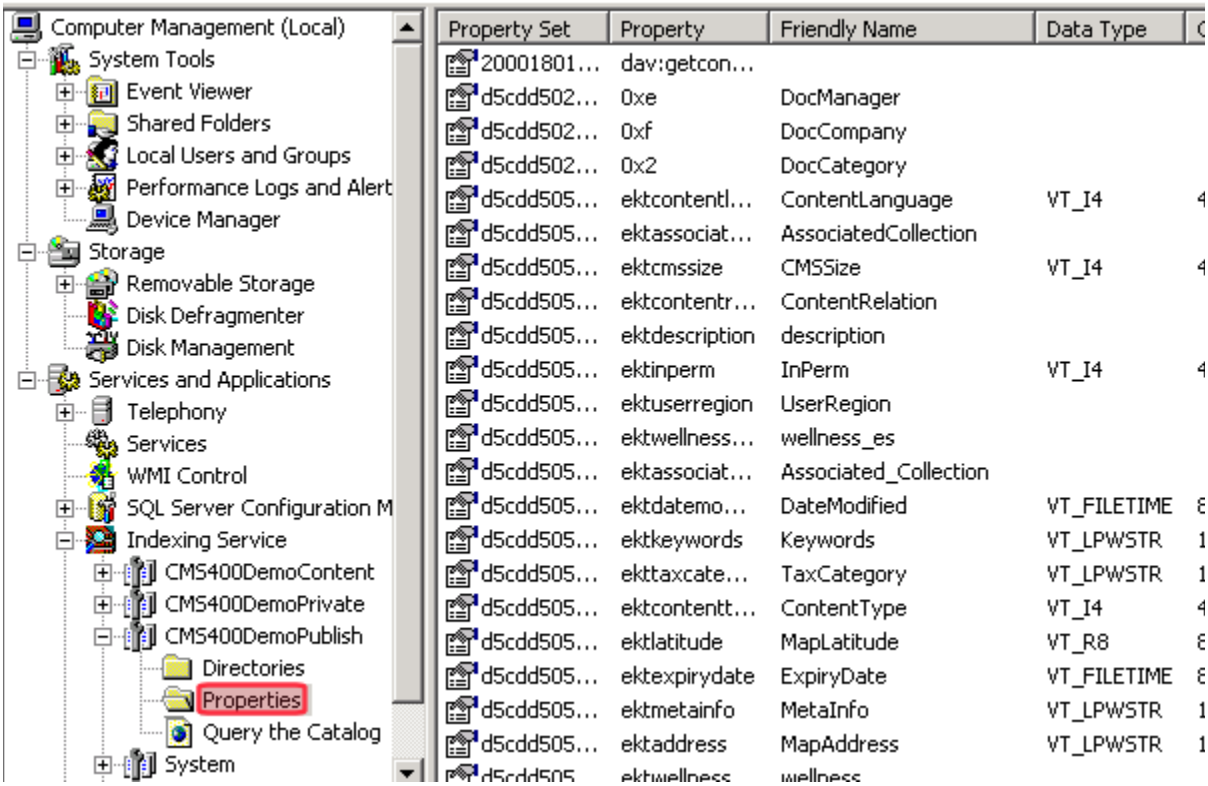
- *siteroot uniqueID* Publish
- *siteroot uniqueID* Private

As indicated, the second catalog stores private assets. *See Also:* ”Private Content” on page 752

To access these catalogs within the indexing service, go to **Computer Management > Services and Applications > Indexing Service**.

Within the file system, these catalogs reside in the `c:\program Files\Ektron\Catalogs\siteroot unique identifier` folder. For example, `C:\Program Files\Ektron\Catalogs\CMS400Min312007131255`.

View a catalog’s properties to see the fields you can use in queries. *See Also:* ”Property Value Queries” on page 451



Changing a Catalog's Name

To change a catalog's name, open the siteroot/web.config file with an editor such as Notepad. Then, update the `catalogName` element for the published catalog name, and the `privateCatalogName` element for the private catalog name.

```
<webSearch defaultProvider="MSIndexDialectServer">
<providers>
<add name="MSIndexDialectServer"
type="Ektron.Cms.WebSearch.SearchProviders.MSIndexDialectProvider, Ektron.Cms.WebSearch"
catalogName="localhostPublished" privateCatalogName="localhostPrivate" pageSize="10"
description="MS Index Server Dialect2 Provider"/>

                <add name="MSIndexServer"
type="Ektron.Cms.WebSearch.SearchProviders.MSIndexProvider, Ektron.Cms.WebSearch"
catalogName="localhostPublished" privateCatalogName="localhostPrivate" pageSize="10"
description="MS Index Server SQL Provider"/>
</providers>
</webSearch>
```

Recreating a Catalog

If a catalog is accidentally deleted or becomes corrupted, follow these steps to recreate one. There are two ways to do this.

- ”Manually Recreating a Catalog” on page 395
- ”Automatically Recreating a Catalog” on page 396

Manually Recreating a Catalog

Part 1: Create a New Catalog and Copy Metaconfig.doc File to it

1. Open the `C:\Program Files\Ektron\Catalogs` folder.
2. Create a folder for the new catalog.
3. From the Computer Management screen, select **Services and Applications > Indexing Service**.
4. If the indexing service is running, right click **Indexing Service** and click **Stop**.
5. Right click the mouse and select **New > Catalog**.
6. Assign the catalog a name. At the **Location** field, browse to the folder you created in Step 2.
7. Navigate to the `C:\Program Files\Ektron\CMS400`*`releasenumber`*`\Utilities` directory and find the metaconfig.doc file.
8. If you are creating a public catalog, copy that file to the *site root*/Assets folder.

   If you are creating a private catalog, copy metaconfig.doc to the *site root*/PrivateAssets folder.
9. From the Computer Management screen, click the new catalog you created in step 5. Underneath it, a Directories folder appears.
10. Select the Directories folder and click **New > Directory**.
11. The Add Directory Screen appears. If you are creating a public catalog, browse to the *site root*/Assets folder. If you are creating a private catalog, browse to the *site root*/PrivateAssets folder.
12. Right click **Indexing Service** and click **Start**.

13. From the Computer Management screen, view the new indexing service. Make sure a number appears in new catalog's **Total Docs** column, and the **Docs to Index** number is zero (0) before proceeding.

Part 2: Update Metaconfig.reg

1. Navigate to the `C:\Program Files\Ektron\CMS400releasenumber\Utilities` directory
2. Open the metaconfig.reg file with an editor like Notepad.
3. Update the first line of that file with the location of the new catalog relative to the `C:\Program Files\Ektron\Catalogs` folder. For example, if the new folder within the catalog folder is named `mytest`, the first line of the metaconfig.reg file looks like this.

```
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndex\Catalogs\mytest\Properties]
```

4. Save the file.
5. Double click the file. This action updates your Windows Registry with the new information.
6. Stop and restart Windows Indexing Service. Both commands are available from the menu that appears when you hover over the Indexing Service and right click the mouse.
7. View the new Indexing Service to verify that all properties exist as in the original service.

Part 3: Update web.config

Follow the directions in "Changing a Catalog's Name" on page 394 to update the catalogs that are updated as content is updated.

Automatically Recreating a Catalog

If you don't want to perform the manual steps listed above, **Ektron CMS400.NET** provides a utility that automatically creates a new catalog. You would typically use this if a catalog were corrupted or accidentally deleted.

IMPORTANT! Before running the Search Data Configuration utility, if your server has Visio documents, install the Visio IFilter. See "Installing the Visio IFilter" on page 445. Also, if your server has Office 2007 documents, install the Microsoft Office

SharePoint Server 2007 IFilters. See http://technet2.microsoft.com/Office/en-us/library/c6c029bd-64ea-4617-b2da-c269f13599e21033.mspx?mfr=true.

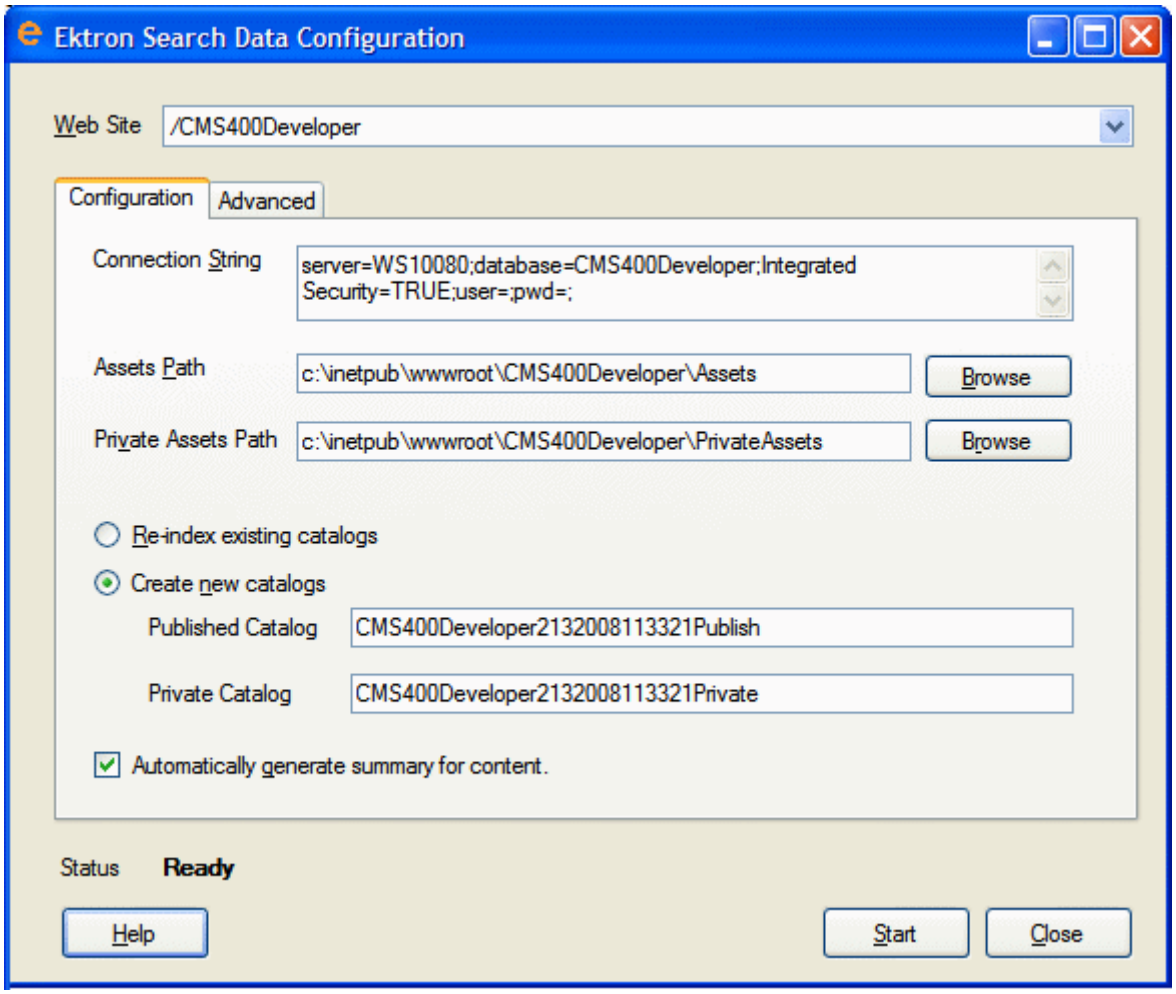
WARNING! Make sure all **Ektron CMS400.NET** users are signed off before you begin this utility. If they are not, the utility logs them off.

To launch the utility, follow this path from the Windows Start button:

Start > Programs > Ektron > CMS400 *version* > Utilities > SearchConfigUI

Alternatively, click the following file: `C:\Program Files\Ektron\CMS400v`*`versionnumber`*`\Utilities\SOFTWARE\SearchConfig\searchconfigUI.exe`

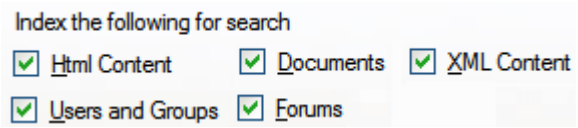
When you do, the following screen appears.



To create a new published asset catalog, follow these steps.

1. In the **Published Catalog** field, enter the name of a new catalog. Or, leave the current catalog name, and the utility will overwrite the catalog.
2. Do the same to create a new or replace the **Private Catalog**.
3. Check the **Create New Catalogs** box.
4. If you want to automatically generate a summary for all content in the new catalog, click the **Automatically generate summary for content** checkbox. *See Also:* "Auto Generating Summaries" on page 80
5. Click the **Advanced** tab.

6. Check each type of content that you want to index for the search.



7. By default, new catalogs are created in the *web site root*/catalogs folder. If you want to create these in another folder, use the **Specify directory for catalogs** field to enter or browse to that folder.
8. Press **Start**.
9. **Ektron CMS400.NET** creates a new catalog and index files for your content.

After you run this utility, the old catalog remains but no new content is written to it. All subsequent changes are written to the new catalog.

See Also: "SearchConfigUI.exe crashes while building search indexes and catalogs" on page 460

The SearchConfig Log

All activity generated by the Search Data Configuration screen is tracked by a log. You can view the log top obtain a history of these changes.

The log is located in the C:\Program Files\Ektron\CMS400v*versionnumber*\Utilities\SOFTWARE\SearchConfig folder. Its name is *date time*.LOG. The log is also available on the Search Data Configuration Screen's Log output tab.

Search Data Configuration Screens

Use these screens to perform the following actions.

- make all **Ektron CMS400.NET** content searchable (do this if you recently switched to a new database)
- make any of the following kinds of content searchable (do this if the search cannot find this content)

  - HTML

- assets
- XML Smart Forms
- users and groups
- forums

- reindex the catalogs
- create a new catalog and index it (do this if a catalog was corrupted or accidentally deleted)

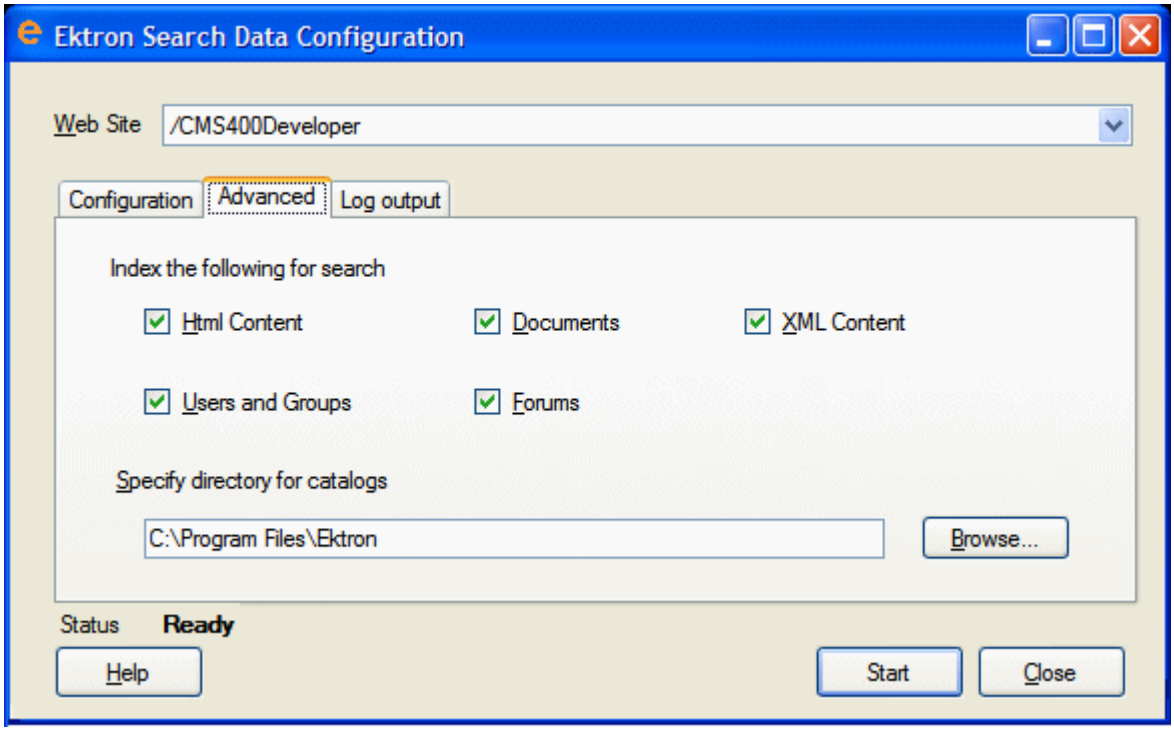
The following table explains the fields on the screens.

See Also: "The SearchConfig Log" on page 399

The Configuration Tab

Field	Description
Web Site	Select the **Ektron CMS400.NET** site that you want to work with
Connection String	Review the connection string to your **Ektron CMS400.NET** database. Update if needed.
Assets Path	Review the path to your site's `Assets` folder. Update if needed.
Private Assets Path	Review the path to your site's `Private Assets` folder. Update if needed.
Re-index existing catalogs	Check this box if you want to reindex the existing catalogs.
Create New Catalogs	Check this box if you want to create a new catalog.
Published Catalog	Review the name of your published catalog. Update if needed. *See Also:* "The Catalogs" on page 393
Private Catalog	Review the name of your private catalog. Update if needed. *See Also:* "The Catalogs" on page 393
Automatically Generate Summary for Content	If you want to automatically generate a summary for all content in the new catalog, click this checkbox. *See Also:* "Auto Generating Summaries" on page 80
Status	After you click the **Start** button, this area indicates the status of the new catalog creation.

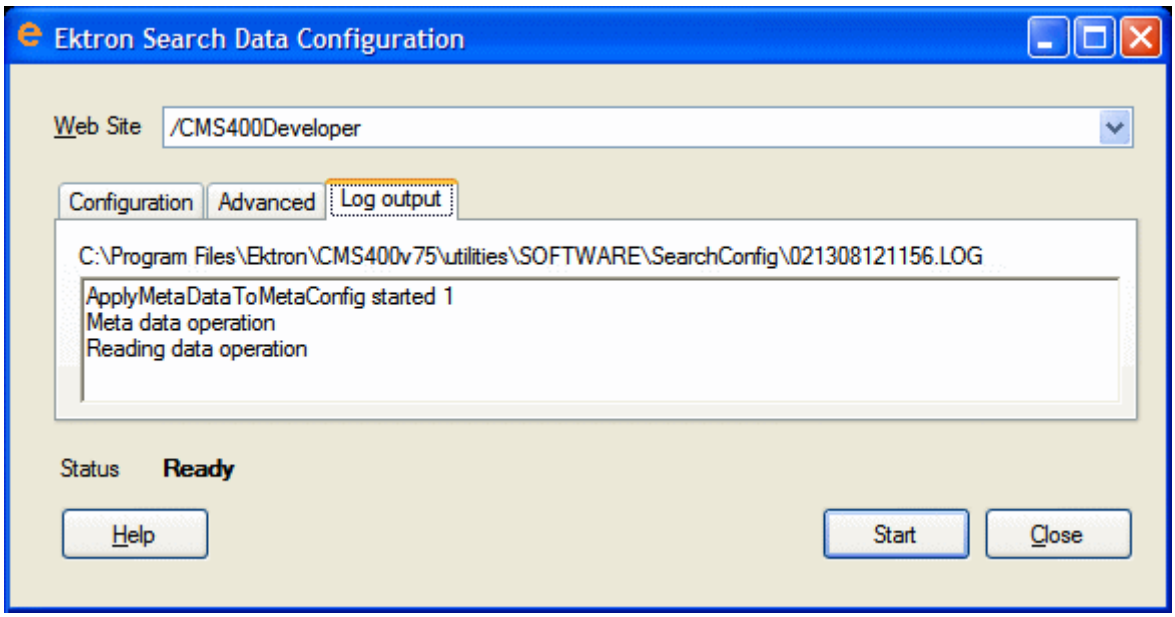
The Advanced Tab



Field	Description
Index the following for Search • Html Content • Users and Groups • Documents • Forums • XML Content	Check each type of content that the search can find.
Specify directory for catalogs	Use this field to change the location of the published and private catalogs, if desired. By default, they reside in the *your web site*/`catalogs` directory.

The Log Output Tab

All activity generated by the Search Data Configuration screen is tracked by a log. The Log Output Tab displays a history of these changes.

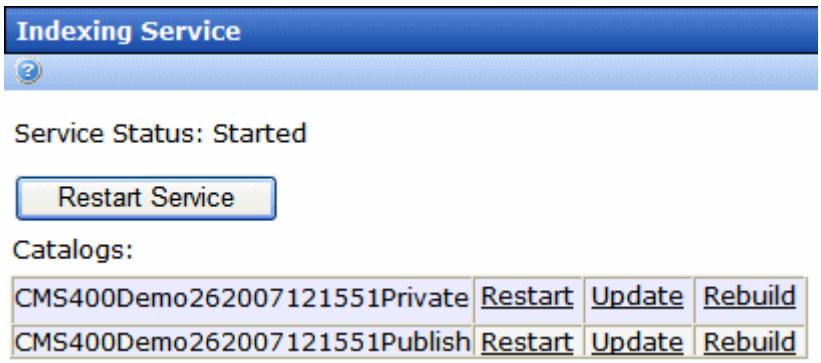


A permanent copy of the log is saved in the `C:\Program Files\Ektron\CMS400v`*versionnumber*`\Utilities\SOFTWARE\SearchConfig` folder. Its name is *date time*.LOG.

Restarting the Indexing Service

Use the Indexing Service screen to restart Windows' Indexing Service. You can also use the screen to rescan the catalogs.

To access the Indexing Service screen, go to **Workarea > Settings > Configuration > Indexing Service**.

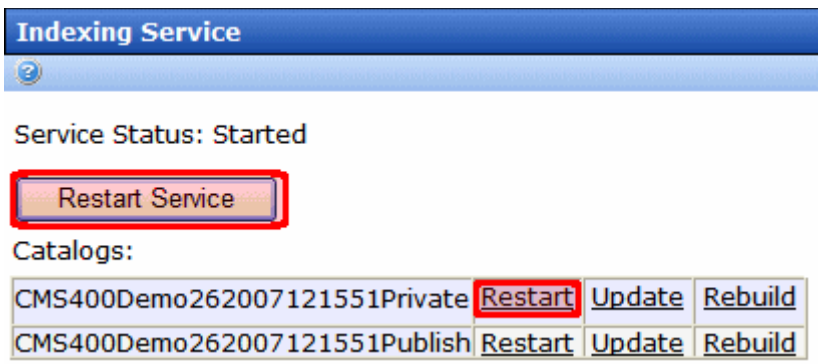


From this screen, you can

- "Restart the Indexing Service" on page 403
- "Run a Full Scan of a Catalog" on page 404
- "Run an Incremental Scan of a Catalog" on page 405

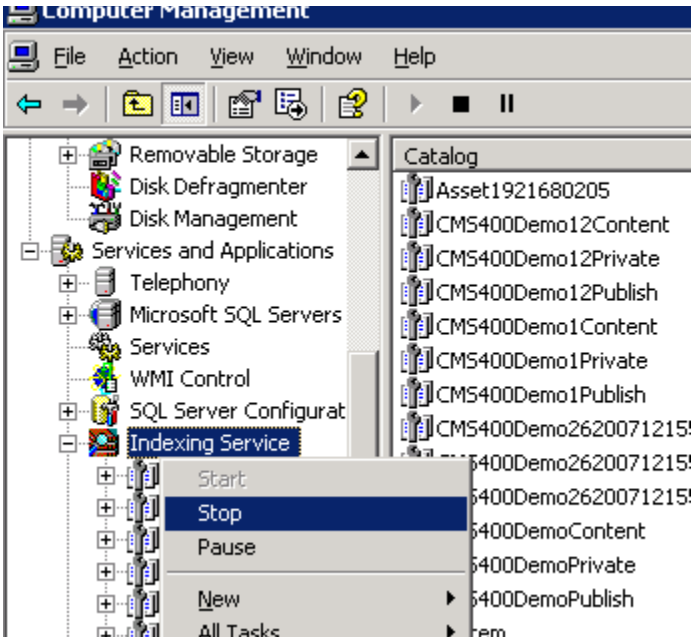
Restart the Indexing Service

Sometimes, when resolving issues with your search, you must stop and restart the indexing service. To restart it via the Indexing Service screen, click the **Restart Service** button.



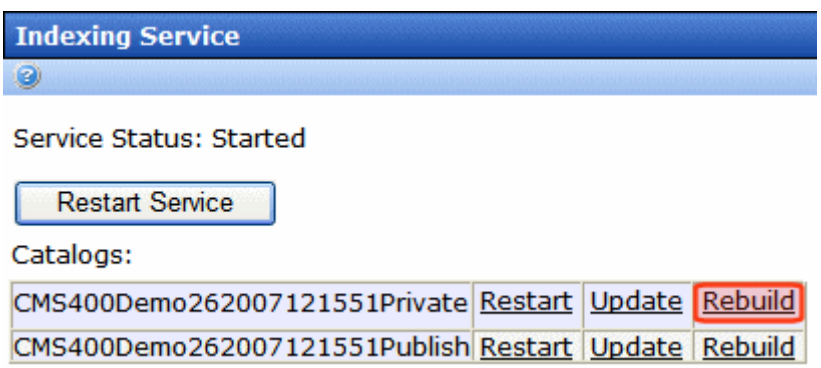
To restart the indexing service for a particular catalog only, click **Restart** to the right of the catalog name.

Alternatively, you can stop and restart the Indexing service from the Computer Management screen, as shown below.



Run a Full Scan of a Catalog

Sometimes, when resolving issues with your search, you need to run a full scan of a catalog. To do this, access the **Settings > Configuration > Indexing Service** screen. Then, click **Rebuild** next to the affected catalog.



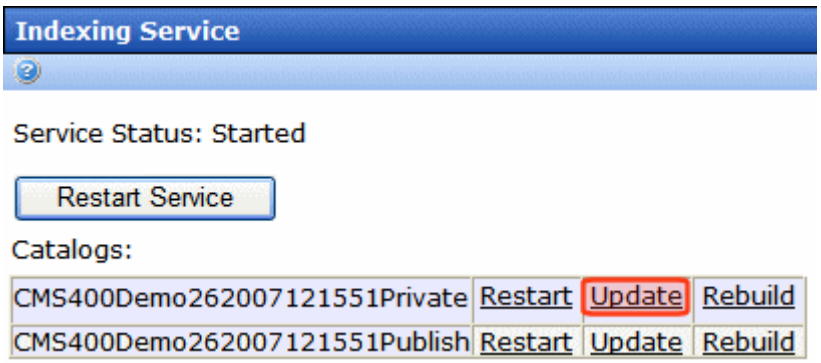
The following text explains the full scan. *(Copied from Microsoft Management Console help)*

A full scan takes a complete inventory of all documents in the cataloged folders and adds them to the list of documents to be indexed. The Indexing Service does a full scan of disk drives attached to your computer (except for removable devices) in the following situations:

- When it is run for the first time after installation
- When a folder is added to the catalog
- As part of recovery if a serious error occurs

Run an Incremental Scan of a Catalog

Sometimes, when resolving issues with your search, you need to run an incremental scan of a catalog. To do this, access the **Settings > Configuration > Indexing Service** screen. Then, click **Update** next to the affected catalog.



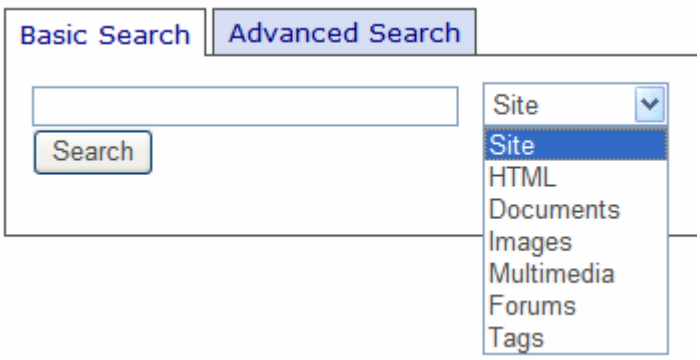
The following text explains the incremental scan. *(Copied from Microsoft Management Console help)*

Microsoft Windows Indexing Service cannot track changes to documents when it is shut down. When Indexing Service restarts, it does an *incremental scan* to detect all documents that were modified while it was inactive so it can update its index.

An incremental scan may also be performed if Indexing Service loses change notifications. This can happen if the update rate of documents is very high and the buffer used to get change notifications from Windows XP overflows.

Basic versus Advanced Web Site Search

When your developer places a Web Search server control on any page, and a site visitor browses to it, he sees the following.



This section now divides into two sections:

- Basic Search (shown above)
- Advanced Search (access this by clicking the **Advanced Search** tab)

This section also explains the following search-related topics.

- ”The Content Searchable Field” on page 412
- ”Display of Search Results” on page 412
- ”Synonym Sets and Suggested Results” on page 416
- ”Using the Integrated Search” on page 434
- ”Setting up a Multiple Site Search Using Virtual Directories” on page 441
- ”Searching for Metadata” on page 445
- ”Installing the Visio IFilter” on page 445

See Also: ”The Advanced Search” on page 409

The Basic Search

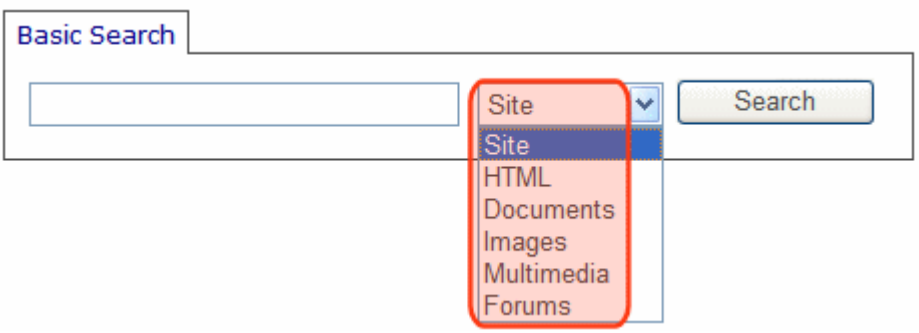
NOTE You can also create a folder with content outside of Ektron CMS400.NET that is searched. For more information, see ”Using the Integrated Search” on page 434.

The Basic Search finds content that satisfies these criteria.

- published
- active (archived content is ignored)
- its **Searchable** check box is checked (see ”The Content Searchable Field” on page 412)
- public. However, private content is available to those with permission to view it, such as membership users after logging in. *See Also:* ”Private Content” on page 752.
- resides in the CMS folder specified in the Web search server control, or in one of that folder’s subfolders if the control’s `recursive` property is set to `true`
- is *not* a non-image file added to the library. Images are searchable, while other files added to the library are not. So, to make files searchable, add them as assets, not library files.
- matches selected language, if site is multilingual
- satisfies text and/or query entered in the search box (no value returns nothing) *See Also:* ”Query Language” on page 446

  - The text inserted in the search field can appear in the content or metadata (*See Also:* ”Searching for Metadata” on page 445)

- satisfies content type criterion selected on screen, if chosen (see below)



NOTE The search does not find documents inside compressed files, such as *.zip, *.cab, etc.

Search Results by Content Type

Search Screen Option	Finds submitted text in these content types
Site	Content from all options below (except Tags) plus Forums
HTML	• HTML • Smart Form (XML) Note: Finds XML field values but not field labels. This has not changed since prior releases. • HTML Form • Blog entries (not comments)
Documents	• MS Office document (includes PowerPoint, Excel) Note: The search finds text within Visio documents if the Visio IFilter has been installed. See "Installing the Visio IFilter" on page 445. • PDF file • .txt file

Search Screen Option	Finds submitted text in these content types
Images added as assets and through the library	.gif, .jpeg, etc.
Multi Media	Flash, .mp3, etc.
Tags	Tags applied to content and library items. *See Also:* "Tags" on page 989

NOTE The search cannot find calendar events.

Searching Multiple Terms

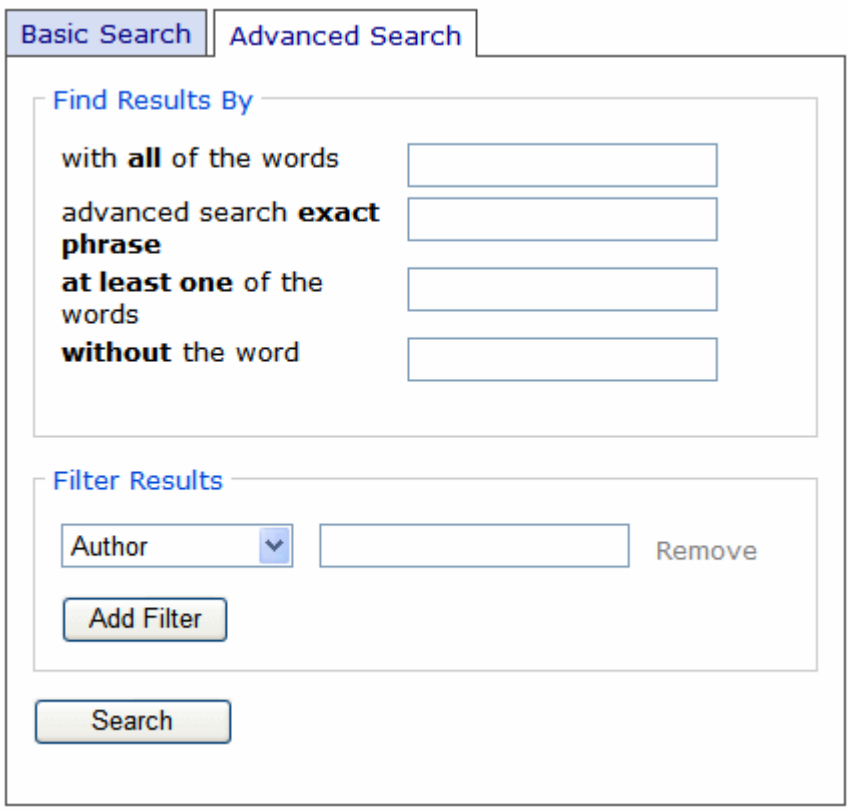
If a site visitor enters several terms, the search only returns pages that include all terms. This is known as an 'and' relationship. For example, if the user enters **cancer** and **cure** in the Search box, only content that includes both terms (and satisfies the other criteria) appears.

Ektron uses an 'and' relationship because we believe it's what a site visitor expects. Consider a simple Google search – the more you enter into the Google Search text box, the fewer results you get, since your phrase is more precise.

The advanced search screen, on the other hand, lets the site visitor determine if he wants an *and*, *or*, *not*, or *exact phrase* relationship. *See Also:* "The Advanced Search" on page 409

The Advanced Search

The Advanced Search uses nearly all the same search criteria as the Basic Search. (See "The Basic Search" on page 407). The differences are additional options and filters (explained below) and the fact that you cannot use queries.



Advanced Search Options

Search Option	Finds these pages
with all of the words	Web page must include all submitted terms; their position on the page does not matter. You cannot enter queries into this field.
with the exact phrase	Web page must include the exact phrase. For example, if you enter **Ektron healthcare**, a page with the term **Ektron provides healthcare** is not found because it is not an exact match.
at least one of the words	Web page can include any one of the submitted terms

Search Option	Finds these pages
without the word	Web page does not contain the submitted word. Only use this option if you also reply to one of the three fields above.

Advanced Result Filters

Below the Advanced Search Options is a list of additional fields you can use to refine the search. These are titled **Advanced Result Filters**.

Result Filter	Prompts site visitor to enter
Author	Enter firstname<space>last name. Can abbreviate by entering part of either name surrounded by asterisks (*). For example, ***Jo*** finds any author whose first or last name contains those letters.
Created Before	All content created before date entered by user. Date format is YYYY/MM/DD.
Created After	All content created after date entered by user. Date format is YYYY/MM/DD.
Modified Before	All content updated before date entered by user. Date format is YYYY/MM/DD.
Modified After	All content updated after date entered by user. Date format is YYYY/MM/DD.
File Size	Enter file size in kilobytes. You can use greater and less than operators (>, <) to find content greater or less than a value. For example, > 10000.

To add a filter, click **Add Filter**. To remove a filter, click **Remove** to the right of the filter.

The Content Searchable Field

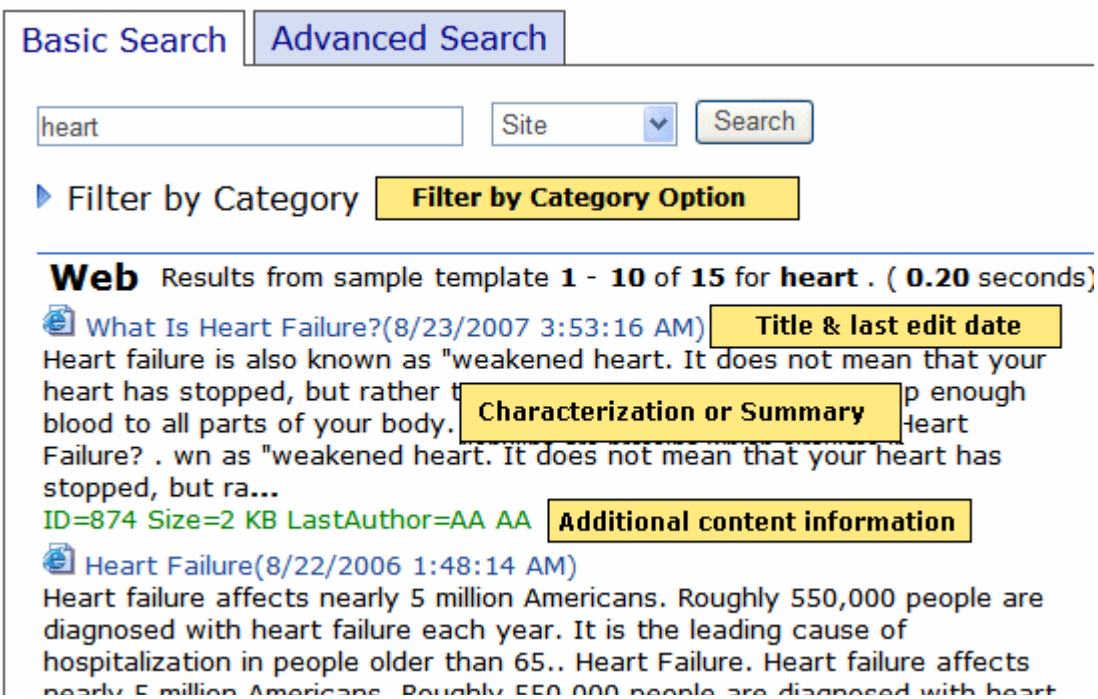
Each content item includes a **Content Searchable** field. The search only considers content whose field is checked. See illustration below.

By default, this field is checked when content is created.

IMPORTANT! Despite the value of this checkbox, if an Ektron CMS400.NET user places this content item in a Suggested Results list, it will appear in the **Suggested Results** area of the Search Results screen. *See Also:* "Suggested Results" on page 420. Also, this content can still be found by the Advanced Workarea search.

Display of Search Results

Below is an example of the Web Site Search and Search Published results screen. Your developer can customize it using the Web Search server control.


Basic Search
Advanced Search
heart
Site
Search
Filter by Category
Filter by Category Option
Web Results from sample template 1 - 10 of 15 for heart . (0.20 seconds)
What Is Heart Failure?(8/23/2007 3:53:16 AM)
Title & last edit date
Heart failure is also known as "weakened heart. It does not mean that your heart has stopped, but rather t
Characterization or Summary
p enough blood to all parts of your body.
Heart Failure? . wn as "weakened heart. It does not mean that your heart has stopped, but ra...
ID=874 Size=2 KB LastAuthor=AA AA
Additional content information
Heart Failure(8/22/2006 1:48:14 AM)
Heart failure affects nearly 5 million Americans. Roughly 550,000 people are diagnosed with heart failure each year. It is the leading cause of hospitalization in people older than 65.. Heart Failure. Heart failure affects

Below the search box is an optional **Filter by Category** link. If your developer enables the link in the WebSearch server control, a site visitor can click it to see a folder structure of taxonomy categories. He can then select categories of interest. When he does, only content that includes the search term and which is assigned to the selected categories appears. For more information, see the **Ektron CMS400.NET** Developer Manual section “Web Search Server Control” > “Filtering Search Results by Category.”

The actual results begin with the title and last edited date. Following them is either

- an abstract of the content, which is automatically generated by the Windows Indexing Service, or
- the content summary (The **Ektron CMS400.NET** User Manual section “Adding a Content Summary)

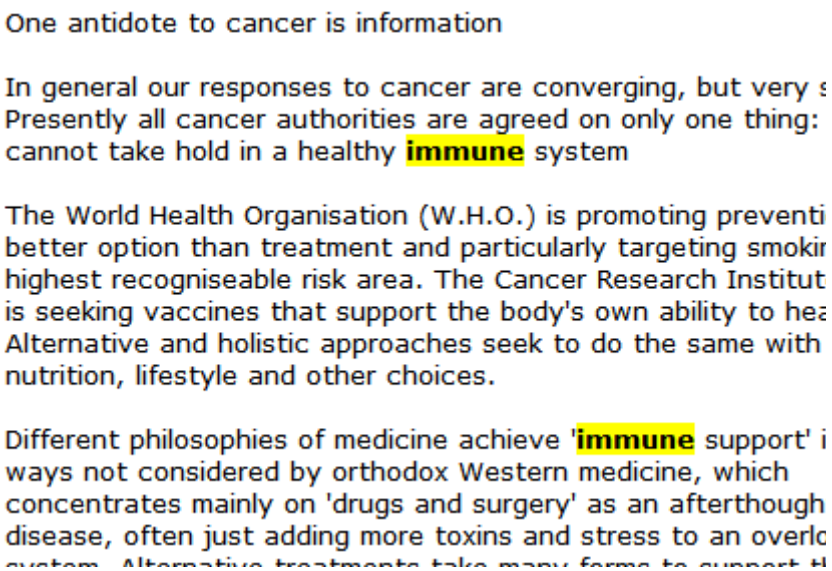
Your developer makes this decision in the WebSearch server control.

Following the abstract or summary is additional information, such as content ID number, size, last author, number of occurrences of the search term, and rank. Your developer determines which criterion is used to order the results.

TECHNICAL NOTE

The Adobe IFilter, which is used to generate the abstract, is only supported in Tier 1 languages (English, French, German, and Japanese). If your Web site uses other languages, the abstract may not be legible. In such a case, your developer should suppress the abstract from the search results. This procedure is documented in the **Ektron CMS400.NET** Developer Manual section "Web Search Server Control" > "Determining the Display of Search Results."

When you click the title of any content item, it appears. The search term is highlighted (see example below) if the following web.config property is set to true: `<add key="ek_termHighlight" value ="true"/>`. To remove the highlighting, set `ek_termHighlight` to `false`.


One antidote to cancer is information

In general our responses to cancer are converging, but very s
Presently all cancer authorities are agreed on only one thing:
cannot take hold in a healthy **immune** system

The World Health Organisation (W.H.O.) is promoting preventi
better option than treatment and particularly targeting smokir
highest recogniseable risk area. The Cancer Research Institut
is seeking vaccines that support the body's own ability to hea
Alternative and holistic approaches seek to do the same with
nutrition, lifestyle and other choices.

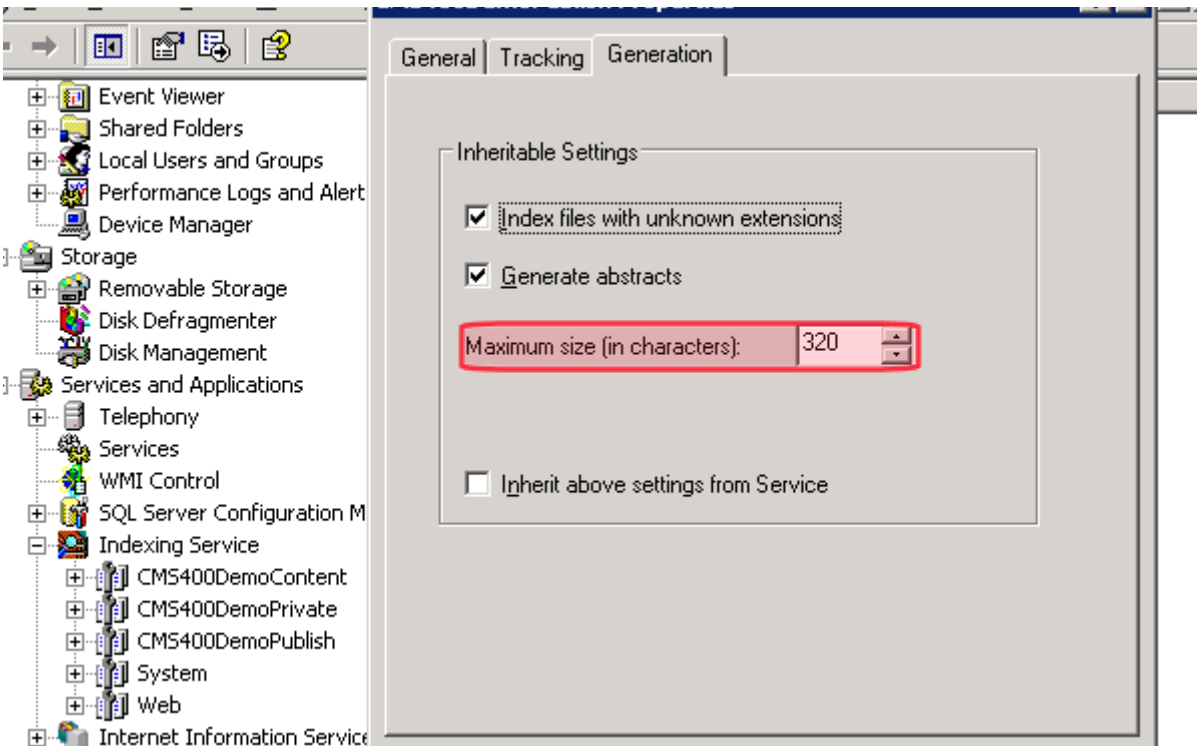
Different philosophies of medicine achieve '**immune** support' i
ways not considered by orthodox Western medicine, which
concentrates mainly on 'drugs and surgery' as an afterthough
disease, often just adding more toxins and stress to an overlo

See Also:

- "Adjusting the Length of the Search Result Abstract" on page 415
- "Search Result Ranking" on page 415

Adjusting the Length of the Search Result Abstract

To adjust the length of the abstract, update the Indexing Service's Properties window > **Generation** tab > **Maximum Size** field (see below).



The abstract's text is taken from the content. (It ignores text in tables.) If the content text has fewer characters than the **Maximum Size**, **Ektron CMS400.NET** tries to complete the abstract by retrieving the title, summary, metadata, comments, and additional information stored in the content item's tabs.

Search Result Ranking

Each content item found by a catalog search is given a numerical rank between 0 and 1000. Search results can be sorted by rank.

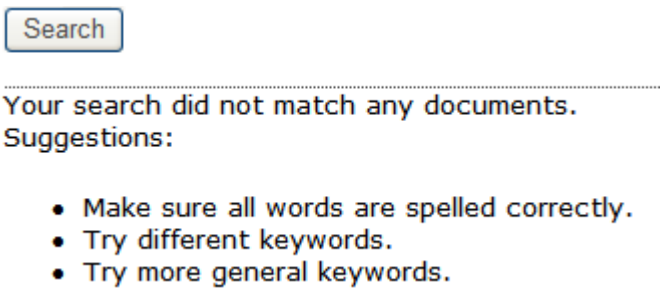
Criteria used to calculate rank include the

- number of occurrences of the search term

- proximity of search term to beginning of file
- proximity of search term to other occurrences of the term
- whether the term is in the title

Customizing the Postback Message

By default, if a search term yields no results, the following message appears on the screen.



If you want to customize this message, follow these steps.

1. In your site root folder, find the `workarea/resources` folder.
2. Open the resource file that corresponds to your site's language. For example, if your site is in American English, open `EkResource.en-US.resources`.

NOTE If your site supports multiple languages, follow these steps for each corresponding resource file. *See Also:* "Procedure for Translating Workarea Strings" on page 929

3. Within the resource file, find the key `lbl search no results`.
4. The default text (shown above) follows this key. Modify the text as needed.
5. Save the file.

Synonym Sets and Suggested Results

This section describes two search enhancements that can be used independently but are more powerful when used together.

- "Synonym Sets" on page 417

- "Suggested Results" on page 420

Synonym Sets

You can create sets of synonyms to work with the search. If a site visitor enters any term in a synonym set into the Search box, **Ektron CMS400.NET**'s search looks for that term plus all other terms in the set.

For example

Synonym Set: Tuition

Terms: tuition, bill, payment, pay, fee, charge, price, amount, cost, money, balance

If a site visitor inserts **bill** into the search field, **Ektron CMS400.NET** uses **bill** or **tuition** or **payment** or **pay** or **fee** or **charge**, etc. to gather search results.

The Synonym Set feature will typically produce more "hits." So, while the user does no more work, his chances of finding the right information on your Web site are greatly increased.

If a term exists in more than one Synonym Set, the search encompasses all terms in all sets.

The following sections explain how to work with Synonym Sets in more detail.

- "Synonym Set Best Practices" on page 418
- "Creating a Synonym Set" on page 418
- "Editing a Synonym Set" on page 419
- "Deleting a Synonym Set" on page 420

TECHNICAL NOTE

The Web Search server control has a `SearchSynonyms` property. This must be set to `true` for a Synonym Set's terms to be included in the search logic.

Synonym Set Best Practices

- Synonyms are searched across all HTML content and documents indexed by **Ektron CMS400.NET** (for example, Word documents).
- **Ektron CMS400.NET**'s search does not include plurals or verb forms. So, if you think a site visitor might enter either **ticket** or **tickets**, enter both into the Synonym Set. Same with **bill**, **billing**, etc.
- A search term can consist of several words as long as the term is entered the same way in the Synonym Set. For example, **love seat** is part of a Synonym Set that includes **sofa**.

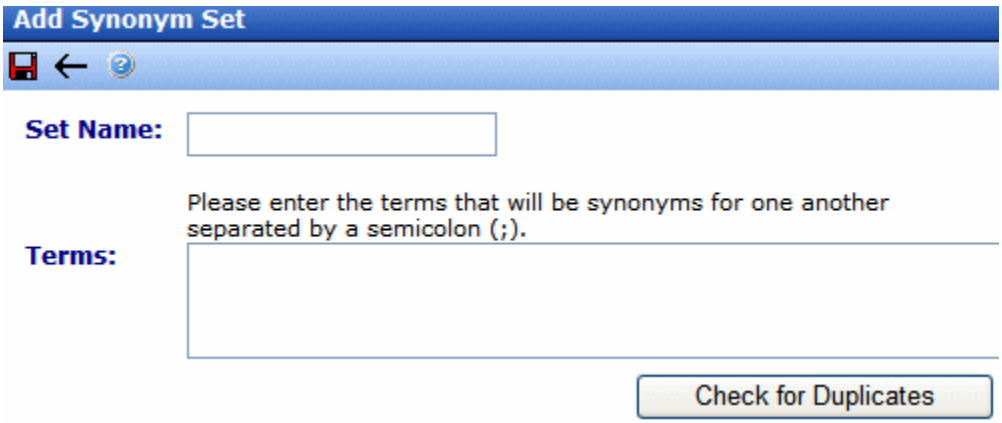
  As long as both love and seat are in a content item, the search finds it even if the words are separated. But, entering a single term, like **love**, will not find that Synonym Set.

  So, if you think people may search using **loveseat** or **love seat**, enter both terms into the Synonym Set.
- The metadata search does not use or support Synonyms Sets.

Creating a Synonym Set

Follow these steps to create a Synonym Set.

1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Synonyms**.
2. From the language dropdown, select a language for the Synonym Set. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only synonyms sets in that language are considered.)
3. Click the Add button ( ).
4. The following screen appears.


Add Synonym Set
Set Name:
Please enter the terms that will be synonyms for one another separated by a semicolon (;).
Terms:
Check for Duplicates

5. Enter a name for the set. **Ektron CMS400.NET** users will use this name to identify the Synonym Set.
6. Enter all terms that make up the set. Separate each with a semicolon (;). You cannot enter a comma (,) or a parenthesis character (() into the **Terms** field.
7. After entering all terms, click the **Check for Duplicates** button. **Ektron CMS400.NET** compares terms in this set against the other Synonym Sets in this language. If the same term is found in another set, you are notified.

   It is not necessarily a problem for a term to exist in more than one Synonym Set. So, review each Synonym Set that contains the duplicate and decide what to do.
8. Click Save ( ).

Editing a Synonym Set

Follow these steps to edit a Synonym Set.

1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Synonyms**.
2. From the language dropdown, select the Synonym Set's language.
3. Click the Synonym Set that you want to edit.
4. Click the Edit button ( ).
5. The Edit Synonym Set screen appears.

6. Add or remove terms. Be sure to separate each term with a semicolon (;).
7. Click the **Check for Duplicates** button. **Ektron CMS400.NET** compares terms in this set against the other Synonym Sets in this language. If the same term is found in another set, you are notified.
8. Click Save ( ).

Deleting a Synonym Set

NOTE Deleting a Synonym Set also deletes any Suggested Results associated with the Synonym Set. The user is warned about this when deleting.

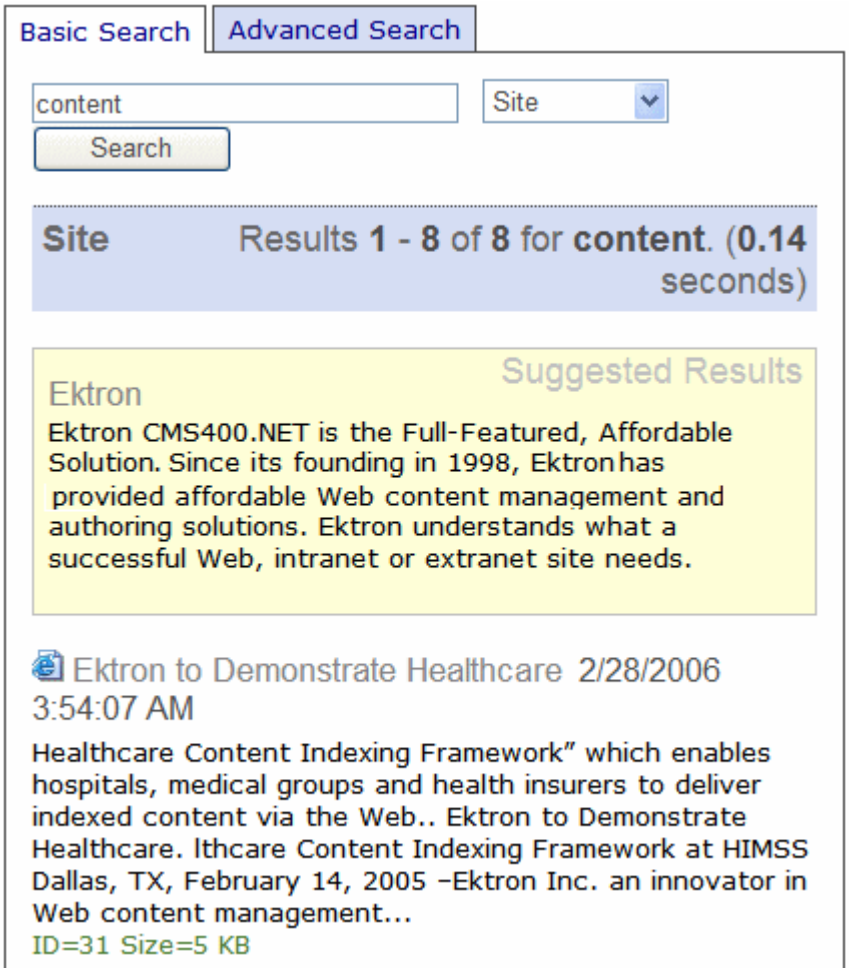
Follow these steps to delete a Synonym Set.

1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Synonyms**.
2. From the language dropdown, select the Synonym Set's language.
3. Click the Synonym Set that you want to delete.
4. Click the Delete button ( ).
5. You are asked to confirm your action.
6. The Synonym Set is deleted.
7. Perform an IIS reset on your server. This utility clears the cache, so that the synonym set is no longer available to **Ektron CMS400.NET**.

See Also: http://technet.microsoft.com/en-us/library/cc781553(WS.10).aspx

Suggested Results

For any term or Synonym Set, you can create a list of *Suggested Result* links. That is, links that appear in a special area of the Search Results page whenever someone searches for a selected term. These links can jump to your Web site or an external Web site.


Basic Search
Advanced Search
content
Site
Search
Site
Results 1 - 8 of 8 for content. (0.14 seconds)
Suggested Results
Ektron
Ektron CMS400.NET is the Full-Featured, Affordable Solution. Since its founding in 1998, Ektron has provided affordable Web content management and authoring solutions. Ektron understands what a successful Web, intranet or extranet site needs.
Ektron to Demonstrate Healthcare 2/28/2006 3:54:07 AM
Healthcare Content Indexing Framework" which enables hospitals, medical groups and health insurers to deliver indexed content via the Web.. Ektron to Demonstrate Healthcare. lthcare Content Indexing Framework at HIMSS Dallas, TX, February 14, 2005 –Ektron Inc. an innovator in Web content management...
ID=31 Size=5 KB

The Suggested Results feature is explained through the following topics.

- "Using Suggested Results to Direct Site Visitors" on page 422
- "Determining the Display of Suggested Results" on page 425
- "Creating a Set of Suggested Results" on page 426
- "Editing a Suggested Result Set" on page 430
- "Deleting a Suggested Results Set" on page 434

TECHNICAL NOTE The Web Search server control has a `ShowSuggestedResults` property. This must be set to `true` for suggested results to appear on the page that hosts that control.

Using Suggested Results to Direct Site Visitors

Use this feature to direct site visitors to pages that do not appear at the top of natural search results. For example, you manage a university's Web site. When a site visitor wants to know where to mail a tuition payment, he enters **bill** into the search field and gets these results.

Faculty member Bill McDermott

The Student Bill of Rights

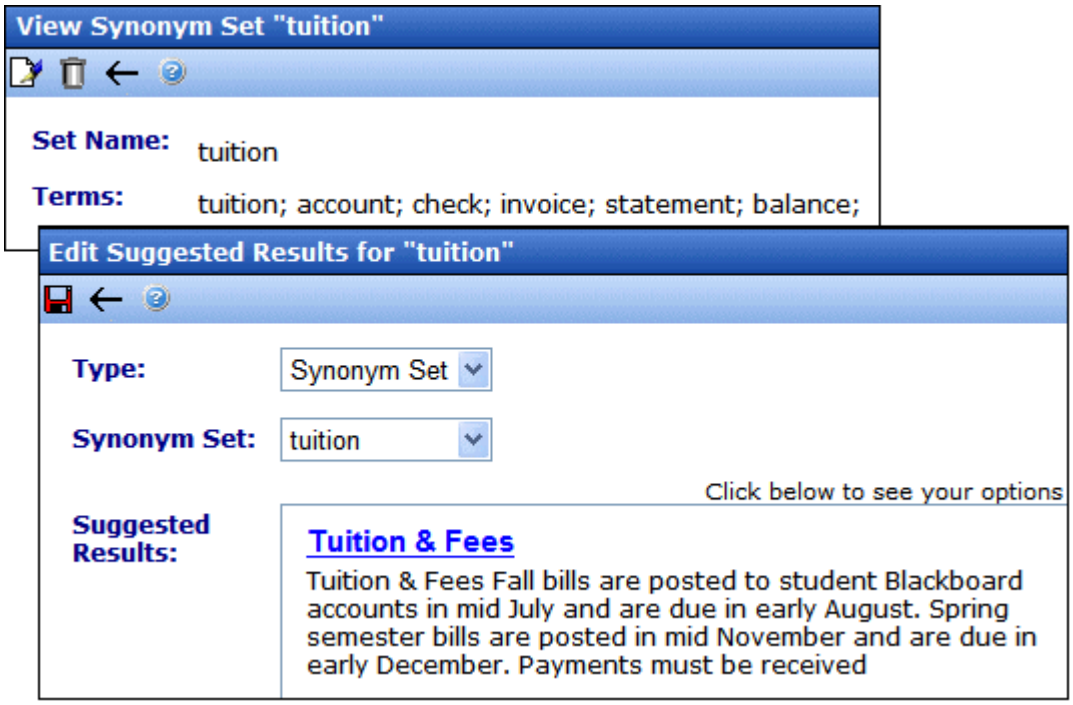
How a Bill Becomes Law

Frustrated, many people call the business office to get information that exists on the Web site but is difficult to find.

Using **Ektron CMS400.NET**, you can combine a Synonym Set with Suggested Results to direct site visitors to the correct Web pages. To continue this example, you could create

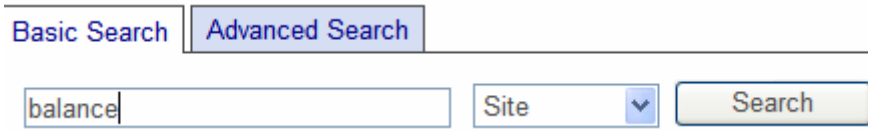
- a Synonym Set (named tuition) that includes all terms people might enter when searching for the tuition page on your Web site. *See Also:* "Synonym Sets" on page 417
- a Suggested Results list in which you assign the "Tuition & Fees" Web page to the **Tuition** Synonym Set

These sets are illustrated below.

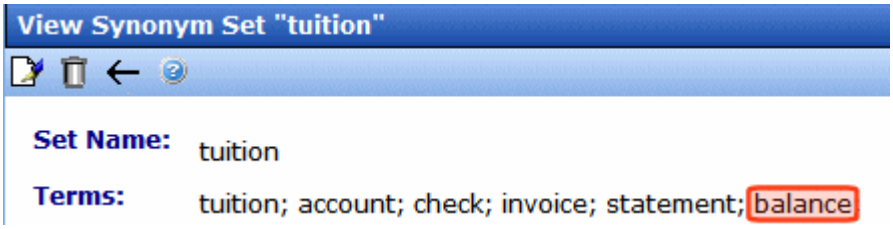

View Synonym Set "tuition"
Set Name:
tuition
Terms:
tuition; account; check; invoice; statement; balance;
Edit Suggested Results for "tuition"
Type:
Synonym Set
Synonym Set:
tuition
Click below to see your options
Suggested Results:
Tuition & Fees
Tuition & Fees Fall bills are posted to student Blackboard accounts in mid July and are due in early August. Spring semester bills are posted in mid November and are due in early December. Payments must be received

After you set up the Synonym Set and Suggested Results, here is a typical sequence of events.

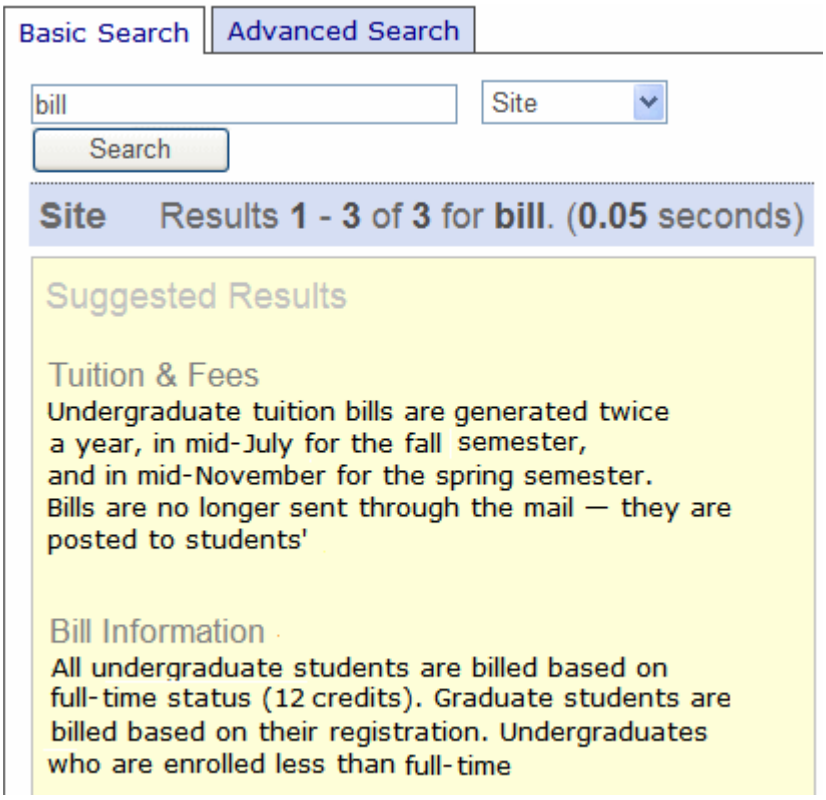
1. A site visitor enters a phrase on your site's **Search** page.



2. The phrase matches a term in a Synonym Set that has Suggested Results.



3. Suggested Result hyperlinks assigned to the set appear in a special area of the results page. They appear in the order you defined when setting up links.


Basic Search
Advanced Search
bill
Site
Search
Site Results 1 - 3 of 3 for bill. (0.05 seconds)
Suggested Results
Tuition & Fees
Undergraduate tuition bills are generated twice a year, in mid-July for the fall semester, and in mid-November for the spring semester. Bills are no longer sent through the mail — they are posted to students'
Bill Information
All undergraduate students are billed based on full-time status (12 credits). Graduate students are billed based on their registration. Undergraduates who are enrolled less than full-time

4. The search term's normal results can also appear. Your developer determines their location on the results page.

Using Suggested Results to Enhance Business Opportunities

You can also use Suggested Results to direct site visitors to business partners' Web sites. One example is a stop smoking clinic near your hospital that has been successful with your patients. When someone visits your Web site and searches for smoking, you can set the clinic to be the top Suggested Result.

As another example, your organization creates widgets but does not implement or customize them. Over time, several agencies develop experience at deploying and customizing your widgets. Therefore, you want to promote these supporting businesses on your site. To do so, create a Synonym Set (for example: deploy,

install, implement, customize, modify, adapt) and assign the Web sites of approved agencies to the Suggested Results list. Then, when a site visitor searches for the word *implement* or *customize*, he gets links to those agencies' Web sites.

Suggested Results can also be used to advertise products, as used in the sponsored results section of popular search engines like Google® search and Yahoo!® .

Determining the Display of Suggested Results

Suggested Results can appear on any page that contains a Websearch server control. They can appear wherever you want: at the top of the search results page, in the right column, etc. You can also choose if and where to display the search term's regular results.

In the Web Search server control, your Web developer determines where search results appear, using either a style sheet or an XSLT. For more information, see the **Ektron CMS400.NET** Developer Manual section "Web Search Server Control."

NOTE The WebSearch server control has a `ResultsPageSize` property. If your developer sets it to less than the number of suggested results applied to a term or synonym set, the `ResultsPageSize` property's number of results appears. For example, if you assign five links to a Suggested Result set but a developer sets `ResultsPageSize` to three, only the first three results appear.

What Happens when a Term Appears in More than One Synonym Set

If more than one Synonym Set contains the same word, and each set has suggested search results, the results appear in chronological order by Synonym Set creation date. Here is an example.

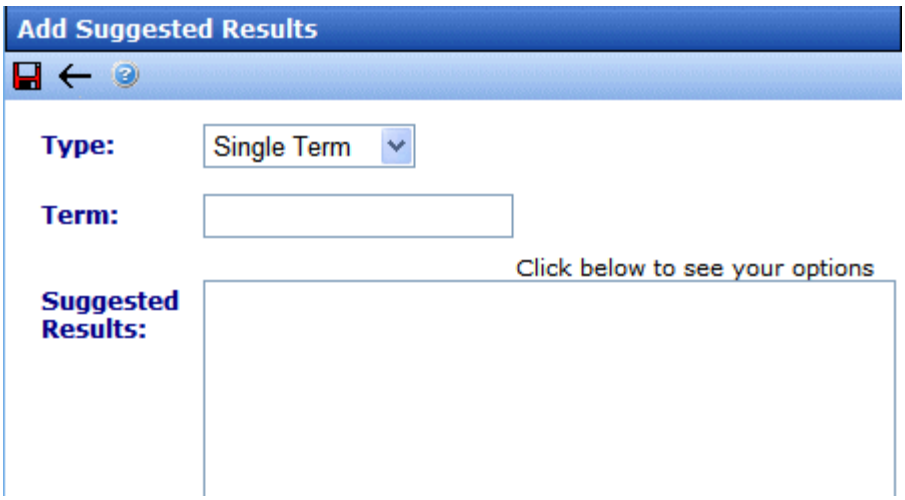
Synonym Set	Terms	Creation Date
Milk production	Cow; Milk; Dairy	January 1, 2007
Animals	Horse; Sheep; Cow	April 16, 2007

When a site visitor searches for Cow, the **Milk production** set's links appear above **Animals** links because it was created first.

Creating a Set of Suggested Results

Follow these steps to create a set of Suggested Results. You cannot enter more than 10 links into any Suggested Results set.

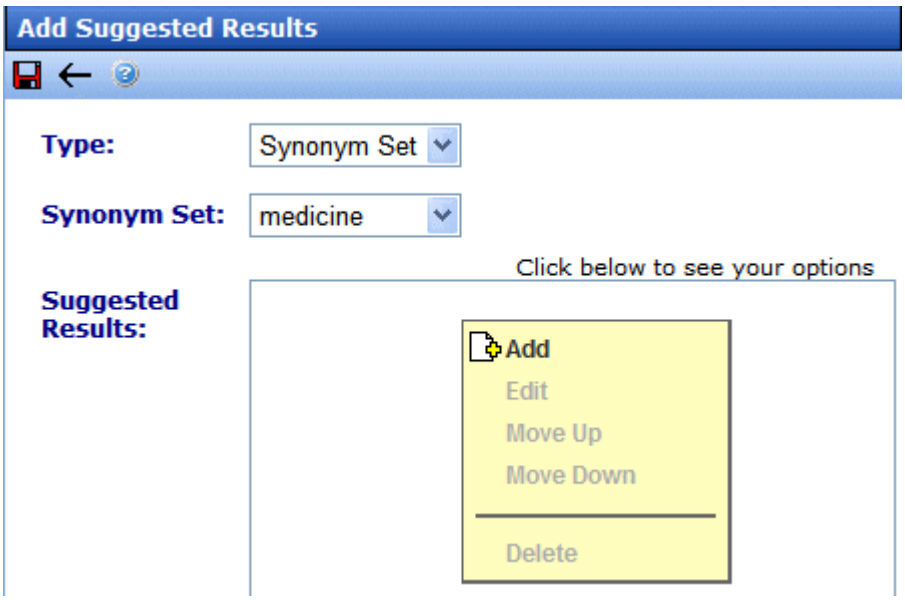
1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only Suggested Results in that language are considered.)
3. Click the Add button ( ).
4. The following screen appears.



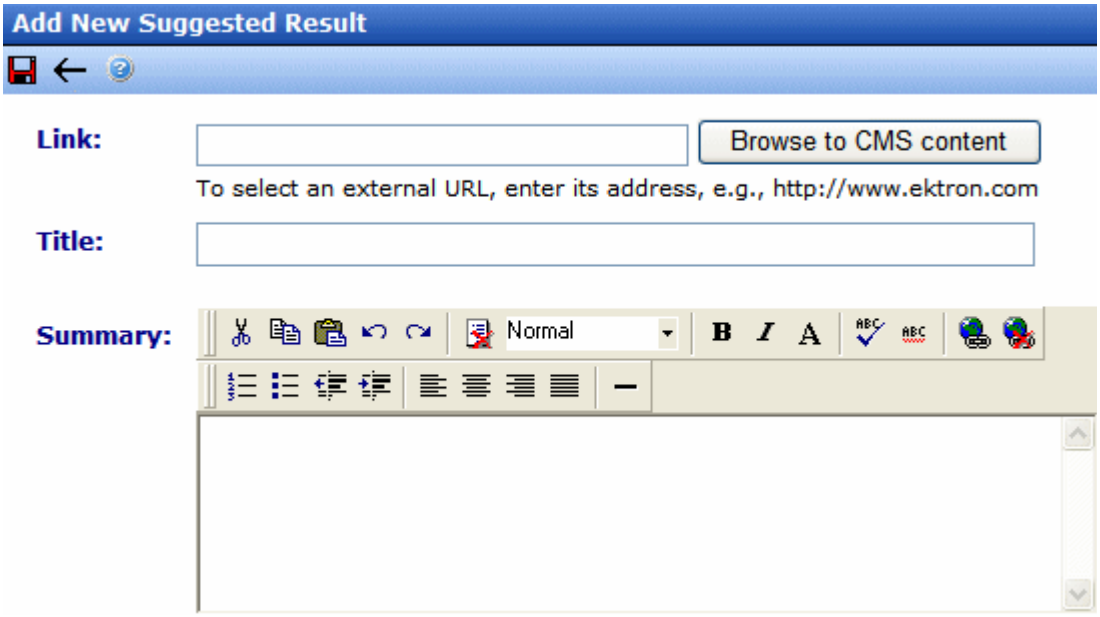
5. Use the following table to complete the fields.

Field	Description
Type	To apply this Suggested Results set to a single term, proceed to the next field, **Term**. To apply this set to a Synonym Set, change this value to **Synonym Set**. (If you do, the next field's name changes to **Synonym Set**.)

Field	Description
Term/ Synonym Set	If the above value is **Single Term**, enter a search phrase that will trigger the Suggested Results you will create below. Note: You cannot enter a comma(,) or a parenthesis character (() into the **Terms** field. If the above value is **Synonym Set**, select from the dropdown the Synonym Set that will trigger the Suggested Results you will create below. That is, if a user enter a search phrase that matches any term in the Synonym Set, the Suggested Results appear.
Suggested Results	Place the cursor in this field. When you click, a menu appears (see illustration below).

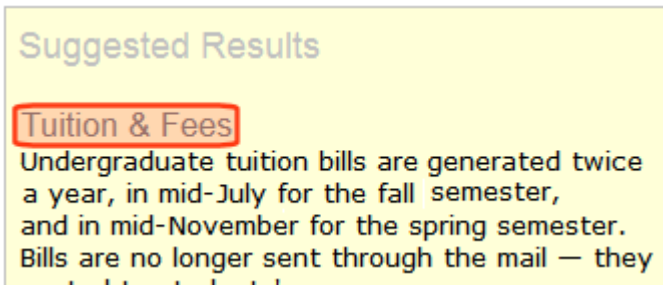
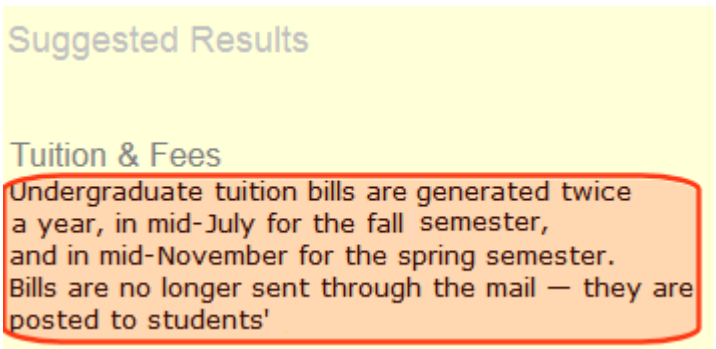


6. Click **Add.**
7. The following screen appears. Here, you add the URL, text, and summary for each Suggested Result.



8. Use the following table to complete the fields.

Field	Description
Link	To create a link to • *content on your Web site*, click the **Browse to CMS content** button. Then, navigate to the folder that contains the content you want to link to. Select the content and click **Save**. • *an external Web site*, enter its full address, starting with `http://`.

Field	Description
Title	If you created a link to • *content on your Web site*, its title is retrieved and displayed here. You may edit it as needed. • *an external Web site*, enter the text of the link that will appear on the Suggested Results display. Site visitors use this text to select the linked Web page. The title is circled in the example below. 
Summary	If you created a link to • *content on your Web site*, its summary appears here. You may edit it as needed. The summary cannot exceed 320 characters (including HTML tags). • *an external Web Site*, nothing appears. Enter up to 320 characters (including HTML tags) to further describe this link on the search results page. The summary is circled in the example below. 

9. Click Save ( ).
10. The Add Suggested Results screen reappears. You can add more links, edit existing ones, etc. When done, click Save ( ).

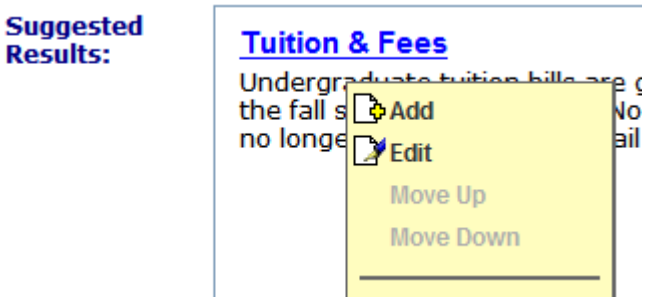
Editing a Suggested Result Set

The following sections explain how to perform the following edits on a Suggested Result Set.

- "Adding a Link to a Suggested Result Set" on page 430
- "Editing a Link in a Suggested Result Set" on page 431
- "Removing a Link from a Suggested Result Set" on page 432
- "Rearranging the Sequence of Links in a Suggested Results Set" on page 433
- "Deleting a Suggested Results Set" on page 434

Adding a Link to a Suggested Result Set

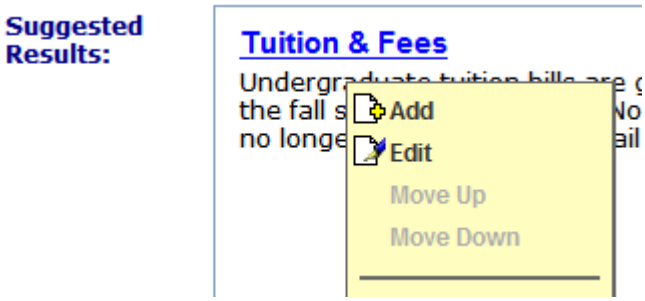
1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only Suggested Results in that language are considered.)
3. Select the Suggested Results set to which you want to add a link.
4. Click the Edit button ( ).
5. Place the cursor over the first result in the Suggested Results area of the screen.
6. Click once and a menu appears.



7. Click **Add**.
8. The Add New Suggested Results screen appears.
9. See "Use the following table to complete the fields." on page 428.
10. Click Save ( ).
11. Click Save ( ) again.

Editing a Link in a Suggested Result Set

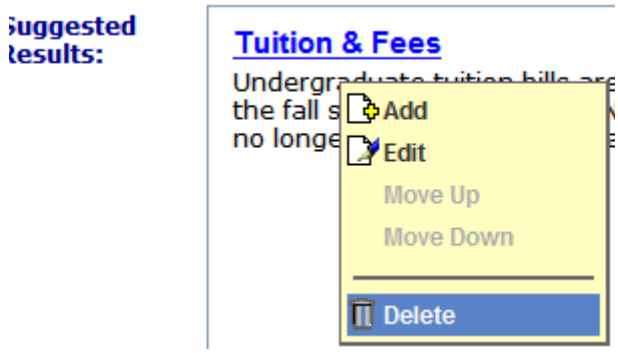
1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results. (The search is language-specific. When a site visitor begins using your site, he selects a language. Only Suggested Results in that language are considered.)
3. Select the Suggested Results set that you want to edit.
4. Click the Edit button ( ).
5. Place the cursor in the Suggested Results area of the screen.
6. Place the cursor on the result that you want to edit.
7. Click once and a menu appears.



8. Click **Edit**.
9. See "Use the following table to complete the fields." on page 428.
10. Click Save ( ).
11. Click Save ( ) again.

Removing a Link from a Suggested Result Set

1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results.
3. Select the Suggested Results set from which you want to remove a link.
4. Click the Edit button ( ).
5. Place the cursor in the Suggested Results area of the screen.
6. Place the cursor over the result that you want to delete.
7. Click once and a menu appears.

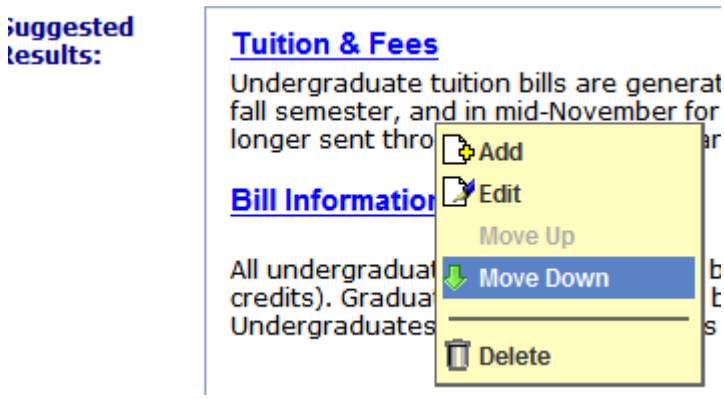


8. Click **Delete**.
9. A confirmation message appears. Click **OK**.
10. Click Save ( ).

Rearranging the Sequence of Links in a Suggested Results Set

Use this procedure to move Suggested Results up or down within a list.

1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results.
3. Select the Suggested Results set from which you want to remove a link.
4. Click the Edit button ( ).
5. Place the cursor in the Suggested Results area of the screen.
6. Place the cursor over the result that you want to move up or down.
7. Click once and a menu appears.
8. Click **Move Up** or **Move Down**.



9. Click Save ( ).

Deleting a Suggested Results Set

1. From the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Search > Suggested Results**.
2. From the language dropdown, select a language for the Suggested Results.
3. Select the Suggested Results set from which you want to remove a link.
4. Click the Delete button ( ).
5. Click **OK** to the confirmation message.

Using the Integrated Search

You can expand the Web search to any Web-accessible files on your server, even if they are not part of **Ektron CMS400.NET**. This feature is called *Integrated Web Search*.

NOTE The Integrated Search only works with a Web Search server control that is placed on a Web page. It does not work with the Workarea search or any other search server control.

Use an Integrated Search if your site's search should include non-**Ektron CMS400.NET** files which, nevertheless, need to be searchable by site visitors. For example, a folder of personnel

policy documents should be searchable on your intranet but you do not want to add them to **Ektron CMS400.NET**.

As another example, you have a Web site of static HTML pages, and are now deploying **Ektron CMS400.NET** for certain parts of the site, such as job listings or a discussion forum. You can create a page with an Integrated Search that encompasses your entire site.

The following topics explain the Integrated Search in more detail.

- ”Integrated Search Overview” on page 435
- ”Setting up a Virtual Directory” on page 435
- ”Setting up an Integrated Search” on page 436
- ”Searching for non-Ektron CMS400.NET Content” on page 440
- ”Integrated Search Content in Search Results” on page 441

Integrated Search Overview

To set up an Integrated Search, create one or more Windows folders underneath the site root folder. Place files to be searched within them or their subfolders.

Alternatively, Integrated Search can find content in any Web-accessible folder on the server’s file system. In this case, create one or more *virtual directories* that point to the site root folder. Then, identify the Integrated Search folder and, if desired, file types to include or exclude when searching. The procedure for doing this is explained in ”Setting up a Virtual Directory” on page 435.

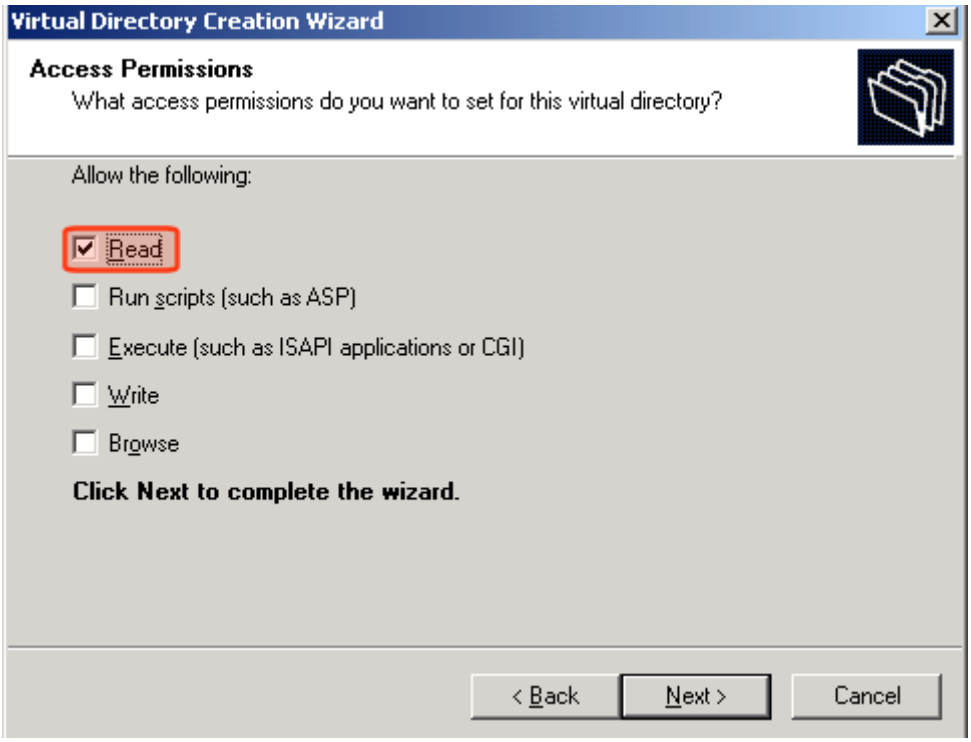
Setting up a Virtual Directory

The Integrated Search’s starting folders can reside anywhere on your server’s file system. If you want a folder to reside somewhere other than under the site root folder, follow these steps to set up a virtual directory. A virtual directory resides in the site root folder, but contains no content -- instead, it points to a Web-accessible folder anywhere in the file system.

IMPORTANT! Although a virtual directory is not on the same server as your site, it must be on the same domain as your site’s server.

Since creating a virtual folder is a Windows procedure, the procedure is explained in http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/5adfcce1-030d-45b8-997c-bdbfa08ea459.mspx?mfr=true.

On the Access Permissions screen that appears during the setup, only check **Read** (see below).



Setting up an Integrated Search

There are three parts to setting up an Integrated Search.

- "Creating an Integrated Search Folder Structure" on page 437
- "Assign the Integrated Search folder to the WebSearch Server Control" on page 437
- "Identifying Integrated Search Folder Information in the Workarea" on page 437

After setting up an Integrated Search, you might want to do these things:

- "Viewing All Integrated Search Folders" on page 439
- "Viewing an Integrated Search Folder" on page 440
- "Editing an Integrated Search Folder" on page 440

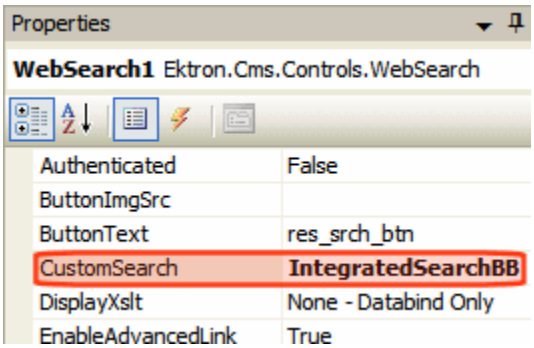
Creating an Integrated Search Folder Structure

1. In the site root folder, create one or more folders for non-**Ektron CMS400.NET** files to be searched. You can create child folders in as many levels as needed underneath these folders.

   Alternatively, create a virtual folder that points to any folder in your file system. *See Also:* "Setting up a Virtual Directory" on page 435
2. Place all files to be searched in the parent or child folders.

Assign the Integrated Search folder to the WebSearch Server Control

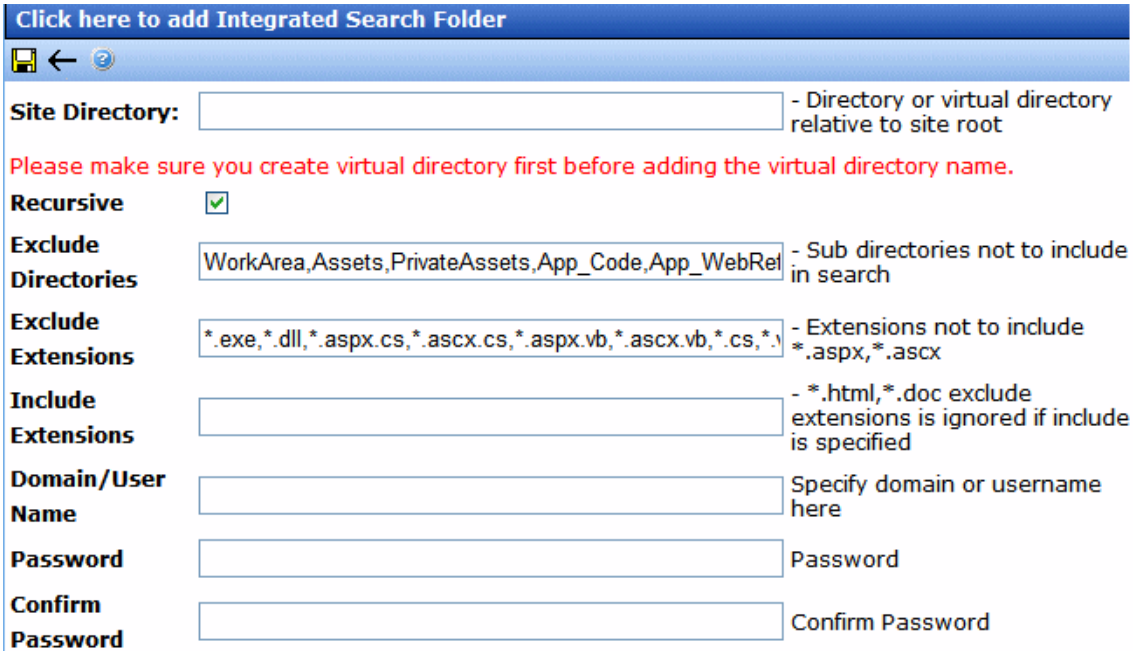
To find Integrated Search content, users must access a Web page that contains a WebSearch server control. Further, you must assign to that control's **CustomSearch** property the names of all top-level Integrated Search folders (see illustration below). Any child folders under the top-level folders are included in the search.



Identifying Integrated Search Folder Information in the Workarea

Follow this procedure for every folder that contains Integrated Search content.

1. In the CMS Workarea, go to **Settings > Configuration > Integrated Search Folders**.
2. Click the Add button ( ).
3. The Add Integrated Search Folder screen appears.


Click here to add Integrated Search Folder
Site Directory:
- Directory or virtual directory relative to site root
Please make sure you create virtual directory first before adding the virtual directory name.
Recursive
Exclude Directories
WorkArea,Assets,PrivateAssets,App_Code,App_WebRef
- Sub directories not to include in search
Exclude Extensions
.exe,.dll,*.aspx.cs,*.ascx.cs,*.aspx.vb,*.ascx.vb,*.cs,*.
- Extensions not to include *.aspx,*.ascx
Include Extensions
- *.html,*.doc exclude extensions is ignored if include is specified
Domain/User Name
Specify domain or username here
Password
Password
Confirm Password
Confirm Password

4. Complete the fields as described in the table below.

   To include *all* files in the folder (except those that would typically not be searched, such as .exe and .dll files), do not modify the **Include Extensions** and **Exclude Extensions** fields.

Field	Description
Site Directory	Enter the name of the parent folder (or virtual folder) that contains the searchable, non-**Ektron CMS400.NET** content. This folder must reside in the site root folder. If you are using a virtual folder, enter its name, not the folder that contains the content. *See Also:* "Creating an Integrated Search Folder Structure" on page 437
Recursive	Check this box if you want the search to include all child folders under the folder in the **Site Directory** field.

Field	Description
Exclude Directories	If you want to exclude files in any directory underneath the directory listed in the **Site Directory** field, enter the names of the directories to exclude. You do not need to enter the path to the directory -- only the name. If you enter more than one directory, use a comma to separate them. By default, **Ektron CMS400.NET** places several directories that a search would typically ignore. Edit as needed.
Exclude Extensions	If you want the search to ignore certain file types, enter those extensions in this format: ***.filetype**. For example ***.xml**. If you enter more than one, separate them with a comma (,). By default, **Ektron CMS400.NET** inserts several file types that a search would typically ignore. Edit as needed. Important! - If you enter any value into the **Include Extensions** field, this field is ignored.
Include Extensions	If you want the search to include only certain file types, enter those extensions in this format: ***.filetype**. For example ***.xml**. If you enter more than one, separate them with a comma (,). Important! - If you enter any value into this field, the **Exclude Extensions** field is ignored.
Domain/User Name, Password and Confirm Password	If the parent folder is a virtual folder that points to another server, enter the domain\user name and password needed to access that server. The parent folder is identified at the **Site Directory** field.

IMPORTANT! Ektron's Windows service runs hourly to index these files. So, you will not see search results for at least an hour after you set up this feature.

Viewing All Integrated Search Folders

To view all integrated search folders, go to **Settings > Configuration > Integrated Search Folders**. The screen displays every folder that will be included in the Integrated Search. *See Also:* "Using the Integrated Search" on page 434

Click any folder to edit its properties or delete it.

If you want to create a new Integrated Search folder, click the Add button ( ). *See Also:* "Creating an Integrated Search Folder Structure" on page 437

Viewing an Integrated Search Folder

This screen displays all information about one Integrated Search folder. *See Also:* "Using the Integrated Search" on page 434

To see documentation for any field on the screen, go to "Complete the fields as described in the table below." on page 438.

To edit information assigned to this Integrated Search folder, click the Edit button ( ).

To delete this Integrated Search, click the Delete button ( ).

Editing an Integrated Search Folder

To edit an integrated search folder, select if from the View Integrated Search Folders screen. Then, click the Edit button ( ).

Edit the fields as needed. To see documentation for any field, go to "Complete the fields as described in the table below." on page 438.

Searching for non-Ektron CMS400.NET Content

You can search for all non-**Ektron CMS400.NET** content by file title. For example, you can find the file Ektron.gif by inserting **Ektron** into the search field.

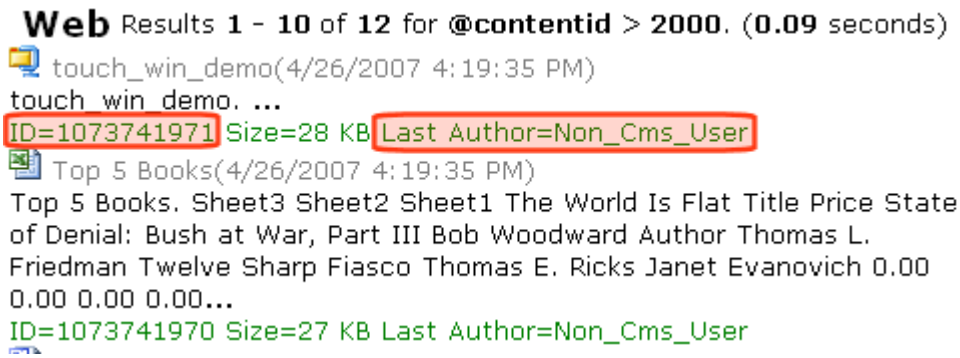
You can search text files (.doc, .pdf, .txt, etc.) by either file name or text within them.

Finally, you can use the following syntax to find files by extension: `#filename *.extension`. For example, to find all .gif files, use `#filename *.gif`. Be sure to click the **Images** button.

NOTE Because Ektron CMS400.NET stores all content in .txt files, you cannot use this syntax to find files with a .txt extension.

Integrated Search Content in Search Results

To distinguish Integrated Search content from regular content, the ID number of IS content begins with 1,000,000,000. Also, the last author name is **Non_Cms_User**. See illustration below.

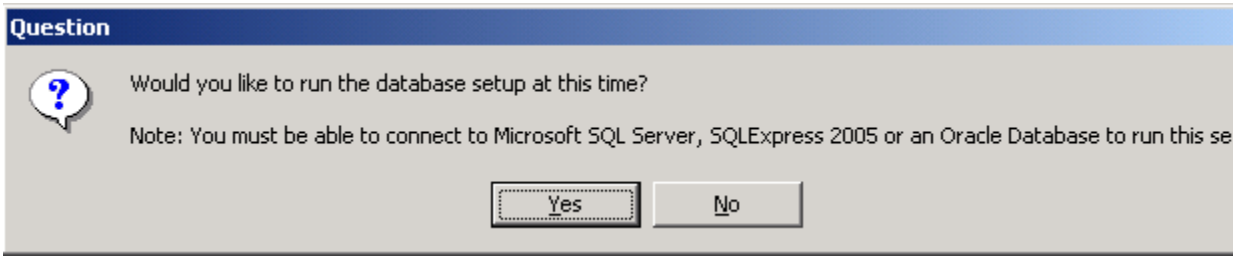

Web Results 1 - 10 of 12 for @contentid > 2000. (0.09 seconds)
touch_win_demo(4/26/2007 4:19:35 PM)
touch_win_demo. ...
ID=1073741971 Size=28 KB Last Author=Non_Cms_User
Top 5 Books(4/26/2007 4:19:35 PM)
Top 5 Books. Sheet3 Sheet2 Sheet1 The World Is Flat Title Price State of Denial: Bush at War, Part III Bob Woodward Author Thomas L. Friedman Twelve Sharp Fiasco Thomas E. Ricks Janet Evanovich 0.00 0.00 0.00 0.00...
ID=1073741970 Size=27 KB Last Author=Non_Cms_User

Setting up a Multiple Site Search Using Virtual Directories

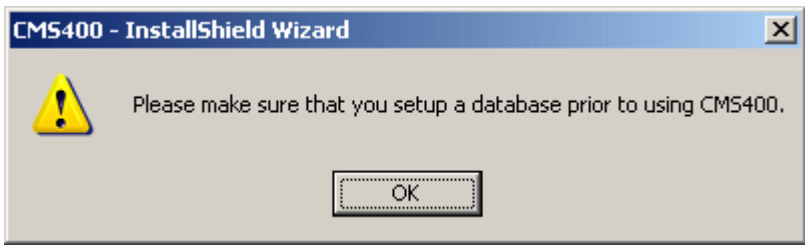
Use the following procedure if you want to set up two sites but use a single database. The steps below allow you to search from either site to find the same content.

In this example, the first site contains the database, while the second site uses virtual directories to point to content in the first site.

1. Set up the first site and create a database for it in the normal manner.
2. Set up the second site, but when you are prompted to set up the database, click **No**.


Question
Would you like to run the database setup at this time?
Note: You must be able to connect to Microsoft SQL Server, SQLExpress 2005 or an Oracle Database to run this se
Yes
No

3. The following message appears. Press **OK**.



4. In the first site, open the web.config file.
5. Copy the database connection information for your database, as indicated below.

```
<connectionStrings>
    <!--FOR SQLSERVER-->
<add name="Ektron.DbConnection" providerName="System.Data.SqlClient"
connectionString="server=(local);database=CMS400Min;Integrated Security=TRUE;user=;pwd=;" />
```

NOTE Your information may be different from the sample above.

In the second site, open the web.config file. Then, overwrite the database information with the text you copied in Step 5.

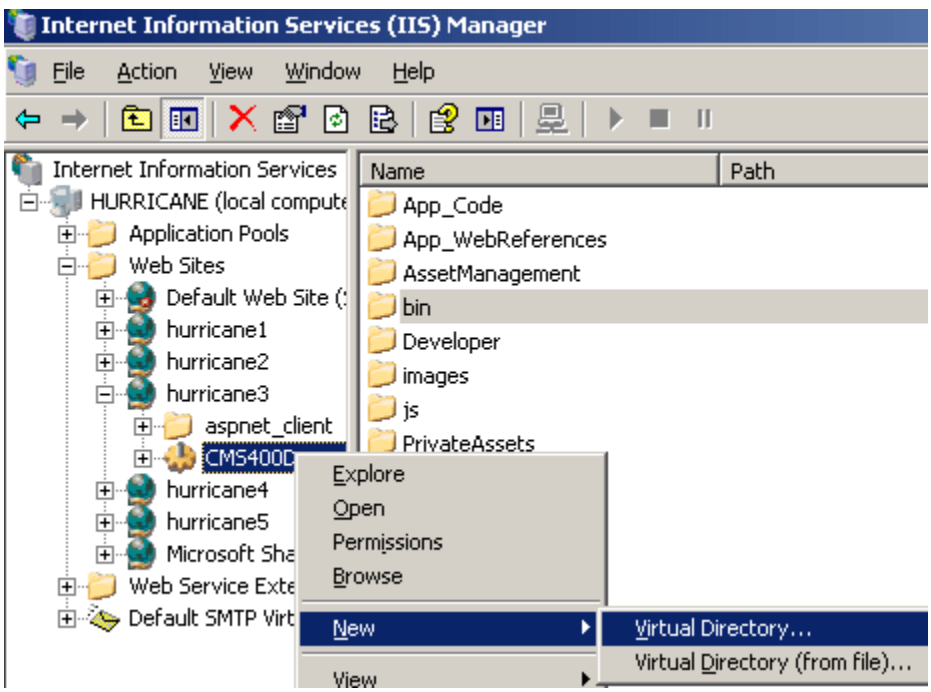
6. Copy the catalog information from the first site to the second. To do this, open the first site's web.config file, and copy the contents of the `<providers>` element (illustrated below).

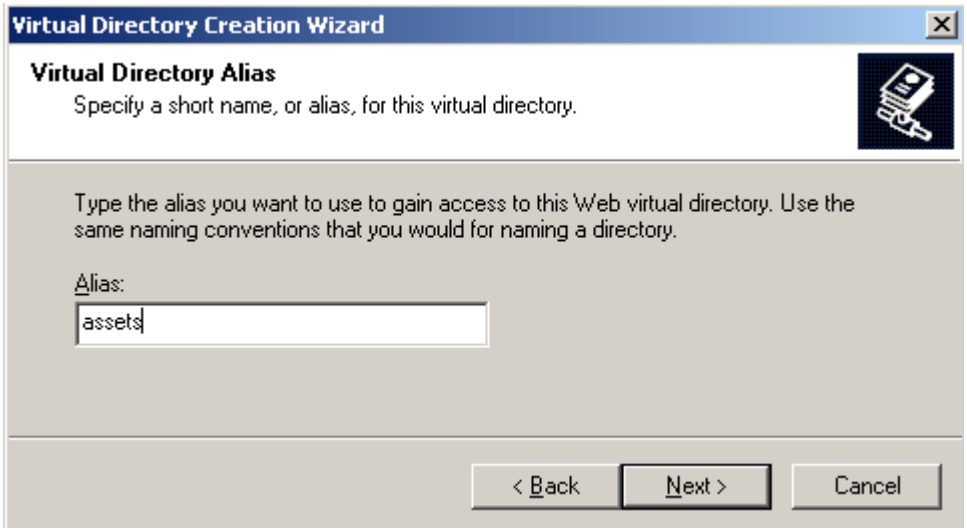
```
<providers>

                <add name="MSIndexServer"
type="Ektron.Cms.WebSearch.SearchProviders.MSIndexProvider,
Ektron.Cms.WebSearch" catalogName="CMS400Min3152007121250Publish"
privateCatalogName="CMS400Min3152007121250Private" pageSize="10"
description="MS Index Server Provider"/>
```

```
                <add name="MSIndexDialectServer"
type="Ektron.Cms.WebSearch.SearchProviders.MSIndexDialectProvider,
Ektron.Cms.WebSearch" catalogName="CMS400Min3152007121250Publish"
privateCatalogName="CMS400Min3152007121250Private" pageSize="10"
description="MS Index Server Dialect2 Provider"/>

    </providers>
```

NOTE The catalog names are examples. You catalog names may be different.

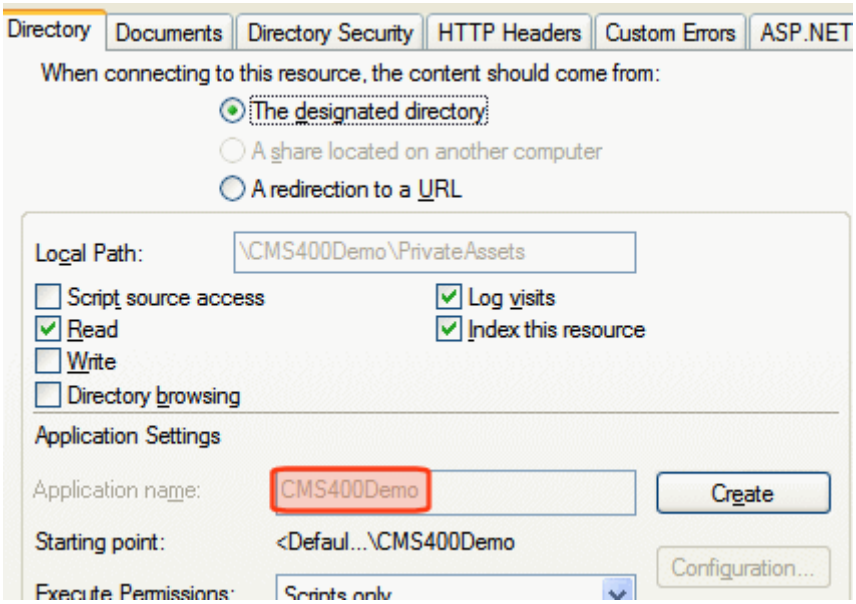
7. In the second site, open the web.config file. Then, overwrite the `<providers>` information with the text you copied in Step 7.
8. Open the folder that contains the first site. Copy the AssetManagement.config file.
9. Open the folder that contains the second site. Overwrite the AssetManagement.config file in that folder with the file you copied in Step 9.
10. Set up the virtual directories. To do that, follow these steps.
    - In IIS, open the second Web site you created in Steps 2 and 3
    - Delete the Assets folder
    - Create a new virtual directory named Assets




Virtual Directory Creation Wizard
Virtual Directory Alias
Specify a short name, or alias, for this virtual directory.
Type the alias you want to use to gain access to this Web virtual directory. Use the same naming conventions that you would for naming a directory.
Alias:
assets
< Back
Next >
Cancel

- When prompted to specify a path to the new Assets folder, navigate to the first site's Assets folder
- When you finish setting up the virtual folder to Assets directory, set up virtual directories in the same manner for the following directories: PrivateAssets, uploaded files, and uploaded images. Remember to delete the folder in the second site before creating the virtual directory.
- Make sure that none of the folders is set up as an application. To do that, open IIS, right click each folder and select **properties**. On the **Directory** tab, the **Application name** field should be grayed out, as shown below.

:



Searching for Metadata

NOTE You can use the SEO Control to identify how search engines evaluate your Web pages' metadata tags, and other search tools. See Also: Ektron CMS400.NET Developer Manual section "Using the Search Engine Optimization (SEO) Control."

- Searchable type metadata values are returned like regular content. *See Also:* "Types of Metadata" on page 118
- It can take up to 30 minutes for newly-added metadata to be available to the search.
- Searchable metadata field names must not include a space. If they do, the search cannot find the metadata.
- To find content with searchable metadata whose style is **yes or no**, enter `true` or `false`.

Installing the Visio IFilter

The search finds text within Visio documents if the Visio IFilter has been installed to the **Ektron CMS400.NET** server. Use the following links to download the Visio IFilter.

Visio Version	Link
2003	http://www.microsoft.com/downloads/details.aspx?FamilyID=dcee9e09-448b-4386-b901-efea29cac808&DisplayLang=en
2002	http://www.microsoft.com/technet/prodtechnol/Visio/visio2002/deploy/ifilter.mspx

Query Language

NOTE Following text collected from Microsoft Web site. © 2006 by Microsoft Corporation. All rights reserved.

To search for any word or phrase on a Web site, enter the word or phrase into the Search field and click the button to begin the search.

This section covers the following topics.

- "Rules for Formulating Queries" on page 447
- "Boolean and Proximity Operators" on page 448 - increase accuracy of searches by inserting Boolean and proximity operators
- "Localized Symbols and Keywords" on page 449 - explains which keywords are supported in foreign languages
- "Wildcards" on page 450 - find pages with words similar to your search term
- "Free-Text Queries" on page 450 - create a query based on a phrase's meaning as opposed to exact wording
- "Vector Space Queries" on page 451 - find pages that match a list of words and phrases
- "Property Value Queries" on page 451 - query a file's properties

- "Query Examples" on page 457 - examples of various queries

Rules for Formulating Queries

When a search is executed, it returns a list of Web pages that contain the word or phrase that a user entered, regardless of where it appears in text.

Follow these rules when formulating queries.

- Multiple words are treated as individual search terms. So, the term **calendar server** returns pages that have both words.

  To find pages that have calendar and server in that exact order, use quotes. "**calendar server**" returns pages that include both terms in that exact order with no intervening words.
- Queries are case-insensitive. You can type a query in upper or lower case.
- The search ignores words in the *noise file*s. **Ektron CMS400.NET**'s noise files screen from the search every single letter of the alphabet as well as many common words, such as about, after, all, and also. Avoid entering such words into the Search Text field, because the search ignores them.

  The list of noise words (noise.enu) is installed to your `siteroot/Workarea` and `Windows/System 32` folders. You can open a noise file with a simple word processor program, such as Notepad, to view the noise words. You can also edit the files. For example, you can remove words that users should be able to search on.

  To make a word in the noise files searchable, remove it from both files then restart both catalogs. *See Also:* "Run a Full Scan of a Catalog" on page 404

  Exceptions:

  - In the **Ektron CMS400.NET** Workarea, the Advanced Search disregards the noise file.

  - You cannot make the indexing service operators (**and**, **or**, **but**) searchable.
- Words in the noise file are treated as placeholders in phrase and proximity queries. For example, if you search for "Word for Windows", the results could return "Word for Windows" and "Word and Windows", because "for" is in the exception list.
- Punctuation marks, such as period (.) and comma (,), are ignored by a search.

- To use special characters, such as &, |, ^, #, @, $, (,), in a query, enclose the query in quotation marks (“).
- To search for a word or phrase containing quotation marks, surround the entire phrase with quotation marks and double the quotation marks around the word to be surrounded with quotes. For example, “World-Wide Web or ““Web””” searches for World-Wide Web or “Web”.
- Use Boolean operators (AND, OR) and the proximity operator (NEAR) to specify additional search criteria. *See Also:* ”Boolean and Proximity Operators” on page 448
- Use the wildcard character (*) to find words with a given prefix. For example, the query **esc*** finds Web pages with “ESC,” “escape,” and so on. *See Also:* ”Wildcards” on page 450
- You can specify free-text queries without regard to query syntax. *See Also:* ”Free-Text Queries” on page 450
- Vector space queries can be specified. *See Also:* ”Vector Space Queries” on page 451
- You can search on ActiveX™ (OLE) and file attribute property values. *See Also:* ”Property Value Queries” on page 451

Boolean and Proximity Operators

Use boolean and proximity operators to create a more precise query.

To Search for	Example	Results
Both terms on a page	healthcare insurance	Pages with words “healthcare” and “insurance”
Either term on a page	kidney or renal —Or— kidney | renal#	Pages with “kidney ” or “renal”
All pages that match a property value	@CMSsize > 1000	Pages greater than 1000 kilobytes

To Search for	Example	Results
Both terms on a page, close together	treatment near immunoglobulin —Or— treatment ~ immunoglobulin	Pages with the word “treatment” near the word “immunoglobulin” *See Also:* ”The NEAR operator is like the AND operator because it finds pages that include both search words.” on page 449

Tips

- To nest expressions within a query, add parentheses. Expressions within parentheses are evaluated before the rest of the query.
- Use double quotes (“) to ignore a Boolean or NEAR operator keyword. For example, “Abbott and Costello” finds pages with the entire phrase, not pages that match the Boolean expression. In addition to being an operator, the word “and” is a *noise word* in English.
- The NEAR operator is like the AND operator because it finds pages that include both search words.

  However, the rank assigned by NEAR depends on the proximity of the search words. A page with the searched-for words closer together has a higher rank than a page where they are farther apart. If the search words are more than 50 words apart, the page is assigned a rank of zero.

NOTE The NEAR operator can be applied only to words or phrases.

- The AND operator has a higher precedence than OR. For example, the first three queries are equal, but the fourth is not:

  - a AND b OR c

  - c OR a AND b

  - c OR (a AND b)

  - (c OR a) AND b

Localized Symbols and Keywords

The symbols (&, |, !, ~) and the English keywords AND, OR, and NEAR work the same in all languages supported by **Ektron CMS400.NET**. Localized keywords are also available when the browser locale is set to one of the following languages.

Language	Keywords
German	UND, ODER, NICHT, NAH
French	ET, OU, SANS, PRES
Spanish	Y, O, NO, CERCA
Dutch	EN, OF, NIET, NABIJ
Swedish	OCH, ELLER, INTE, NÄRA
Italian	E, O, NO, VICINO

Wildcards

Wildcard operators find pages that contain words similar to a given word.

To Search For	Example	Results
Words with the same beginning letters	pharm*	Pages with words that have the prefix **pharm**, such as **pharmaceutical, pharmacist**, and **pharmacology**.
Words based on any form of a verb	fly**	Pages with any form of a verb. For example, if you enter **fly**, the search returns pages that contain **flying**, **flown**, **flies**, and **flew**.

Free-Text Queries

A free-text query finds pages that match the meaning, not the exact wording, of submitted words and phrases. Begin free-text queries with `$contents`.

You cannot use boolean, proximity, or wildcard operators in a free-text query.

To Search For	Example	Results
Files that match free-text	$contents how do I print in Microsoft Excel?	Pages that mention printing and Microsoft Excel

Vector Space Queries

The search supports *vector space* queries, which return pages that include a list of words and phrases. Each page is ranked according to how well it matches the query.

To Search for	Example	Results
Pages that contain specific words	light, bulb	Files with words that best match the search words
Pages that contain weighted prefixes, words, and phrases	invent*, light[50], bulb[10], “light bulb”[400]	Files that contain words prefixed by “invent,” the words “light,” “bulb,” and the phrase “light bulb” (the terms are weighted)

Tips

- Separate terms in a vector query with commas (,)
- You can weight terms in vector queries by using the `[weight]` syntax (see example above)
- Pages found by vector queries do not necessarily match all words submitted in the query
- Vector queries work best when results are sorted by rank

Property Value Queries

Use a property value query to find files whose property values match a given criteria. Properties you can query include file information (like file name and size), and ActiveX properties, including the document summary stored in files created by ActiveX-aware applications.

There are two types of property queries.

- **Relational property queries** - consist of an “at” character (@), a property name, a relational operator, and a property value. For example, to find all files larger than one million kilobytes, use `@CMSsize > 1000000`. *See Also:* ”Relational Operators” on page 453
- **Regular expression property queries** - consist of a number sign (#), a property name, and a regular expression for the property value. For example, to find all .avi files, use `#filename *.avi`. *See Also:* ”Regular Expressions” on page 455

  Regular expressions do not match the contents (`#contents`) and all (`#all`) properties.

  In regular expression property queries, you can only use properties that are retrievable at query time. Properties that are not retrievable include HTML META properties not stored in the property cache.

Property Names

Property names are preceded by the “at” sign (@) for relational queries, and the pound sign (#) for regular expression queries.

If no property name is specified, `@contents` is assumed.

Properties available for all files are listed below.

Property Name	Description
All	Matches words, phrases, and any property
Contents	Words and phrases in the file Note: The contents property does not support relational operators. If a relational operator is specified, no results are found. For example, `@contents Ektron` finds documents containing Ektron, but `@contents=Ektron` finds none.
Filename	Name of the file

Property Name	Description
CMSsize	File size
Write	Date file was created or last modified (whichever is later)

You can also use ActiveX property values in queries. You can search for files created by most ActiveX-aware applications by querying for the following properties.

Property Name	Description
DocTitle	Title of the document
DocSubject	Subject of the document
DocAuthor	The document's author
DocKeywords	Keywords for the document
DocComments	Comments about the document

Relational Operators

Use relational operators to create relational property queries.

To Search for	Example	Results

Property values in relation to a fixed value	`@CMSsize < 100`
	`@CMSsize <= 100`
	`@CMSsize = 100`
	`@CMSsize != 100`
	`@CMSsize >= 100`
	`@CMSsize > 100`
		Files whose size matches the query

To Search for	Example	Results
Property values with all of a set of bits on	`@attrib ^a 0x820`	Compressed files with the archive bit on
Property values with some of a set of bits on	`@attrib ^s 0x20`	Files with the archive bit on

Property Values

To Search for	Example	Results
A specific value	`@DocAuthor = "Bill Bailey"`	Files authored by Bill Bailey
Values beginning with a prefix	`#DocAuthor George*`	Files whose author property begins with George
Files of any extension	`#filename *.gif`	Files with a .gif extension Note: Because **Ektron CMS400.NET** stores all content in .txt files, you cannot use this syntax to find files with a .txt extension.
Files modified after a certain date	`@write > 2006/02/14` Note: You cannot use the equal operator (=) with @ write. Only greater than (>) and less than (<) operators work.	Files modified after February 14, 2006
Vectors matching a vector	`@vectorprop = { 10, 15, 20 }`	ActiveX documents with a vectorprop value of { 10, 15, 20 }
Vectors where each value matches a criterion	`@vectorprop >^a 15`	ActiveX documents with a vectorprop value in which all values in the vector are greater than 15

To Search for	Example	Results
Vectors where at least one value matches a criterion	`@vectorprop =^s 15`	ActiveX documents with a vectorprop value in which at least one value is 15

Tips for Using Property Queries

- Use the pound (#) character before the property name when using a regular expression in a property value.

  Use the “at” (@) character otherwise. The equal (=) relational operator is assumed for regular-expression queries.
- File name (#filename) is the only property that efficiently supports regular expressions with wildcards to the left of text.
- Dates use the format yyyy/mm/dd.

  You can omit the first two characters of the year. If you do, 29 or less is interpreted as the year 2000, and 30 or greater is interpreted as the year 1900. All dates are in Greenwich Mean Time (GMT).
- Currency values use the format x.y, where x is the whole value amount and y is the fractional amount. There is no assumption about units.
- Boolean values are (t) or (true) for TRUE and (f) or (false) for FALSE.
- Vectors (VT_VECTOR) are expressed as an opening brace ({), a comma-separated list of values, and a closing brace (}).
- Single-value expressions that are compared against vectors are expressed as a relational operator, then a (^a) for all of or a (^s) for some of. *See Also:* ”Relational Operators” on page 453
- Numeric values can be expressed in decimal or hexadecimal (preceded by 0x).

Regular Expressions

Regular expressions in property queries are defined as follows.

- Any character except asterisk (*), period (.), question mark (?), and vertical bar (|) defaults to matching itself.

- A regular expression can be enclosed in matching quotes (“). It *must* be enclosed in quotes if it contains a space ( ) or closing parenthesis ()).
- The characters *, ., and ? behave as in Windows. They match any number of characters, match (.) or end of string, and match any one character, respectively.
- The character | is an escape character. After |, the following characters have special meaning:

  - **(** opens a group. Must be followed by a matching).
  - **)** closes a group. Must be preceded by a matching (.
  - **[** opens a character class. Must be followed by a matching (un-escaped) **]**.
  - **{** opens a counted match. Must be followed by a matching }.
  - **}** closes a counted match. Must be preceded by a matching {.
  - **,** separates OR clauses.
  - * matches zero or more occurrences of the preceding expression.
  - **?** matches zero or one occurrences of the preceding expression.
  - **+** matches one or more occurrences of the preceding expression.

  Anything else, including |, matches itself.
- Between square brackets ([]), the following characters have special meaning.

  - **^** matches everything but following classes. Must be the first character.
  - **]** matches]. May only be preceded by ^. Otherwise, it closes the class.
  - **-** range operator. Preceded and followed by normal characters.

  Anything else matches itself (or begins or ends a range at itself).
- Between curly braces ({}), the following syntax applies.

  - |{m|} matches exactly m occurrences of the preceding expression. (0 < m < 256).

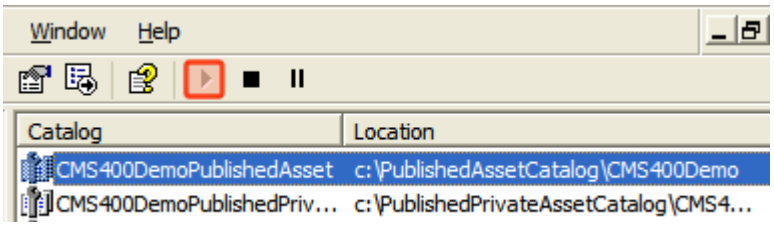
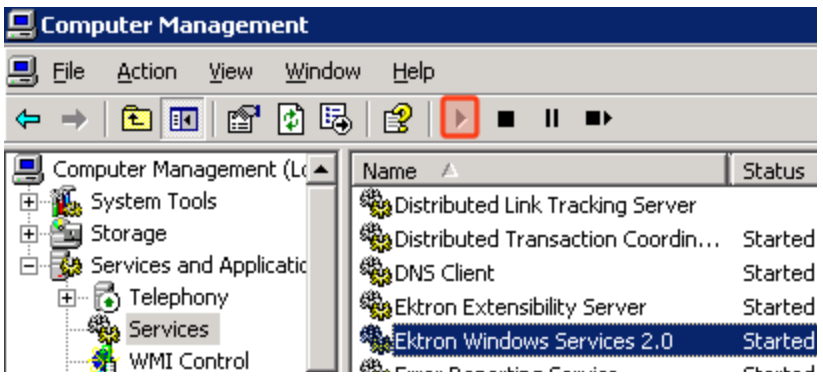
- |{m,|} matches at least m occurrences of the preceding expression. (1 < m < 256).
- |{m,n|} matches between m and n occurrences of the preceding expression, inclusive. (0 < m < 256, 0 < n < 256).

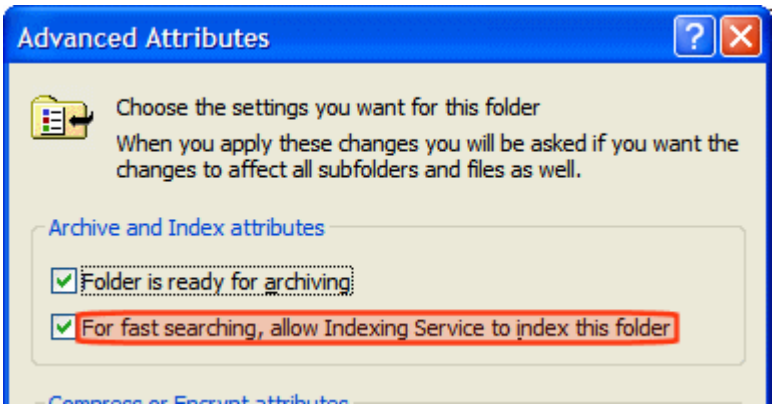
- To match *, ., and ?, enclose them in brackets (for example, |[*]sample matches “*sample”).

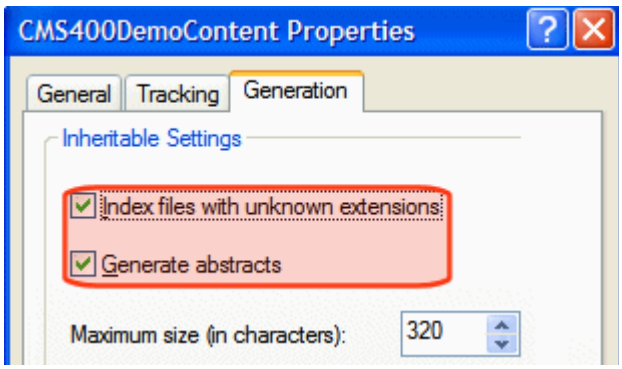
Query Examples

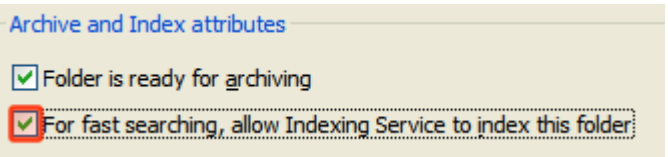
Example	Results
@CMSsize > 10000	Pages larger than 10 MB
@write > 2003/05/12 Note: You cannot use the equal operator (=) with @ write. Only greater than (>) and less than (<) operators work.	Pages modified after the date
pear tree	Pages with the phrase “pear tree”
“pear tree”	Same as above
@contents pear tree	Same as above
Ektron and @CMSsize > 10000	Pages with the word “Ektron” that are larger than 10 thousand kilobytes
“Ektron and @CMSsize > 10000"	Pages with the phrase specified (not the same as above)
#filename *.avi	Video files (the # prefix is used because the query contains a regular expression)
@attrib ^s 32	Pages with the archive attribute bit on
@docauthor = “John Stanton”	Pages with the given author
$contents why is the sky blue?	Pages that match the query

Search Troubleshooting

Problem	Solutions
You publish content but cannot find it using the search	1. Wait 5 or 10 minutes (depends on the load on the server). 2. Make sure the Microsoft indexing service is running (**Computer Management > Services and Applications > Indexing Service**). Verify that the Run button is grayed out. If the service is not running, start it.  3. Query the catalog using the new content's ID. See "Querying the Catalog for the Content" on page 461. 4. Make sure the Ektron Windows service is running (**Computer Management > Services and Applications > Services > Ektron Windows Services 2.0**). Verify that the Run button is grayed out.  If the service is not running, start it. If you do, it may take a while for the service to prepare the content for indexing. *(Continued below)*

Problem	Solutions
You publish content but cannot find it using the search *(continued)*	1. Make sure the *siteroot*/Assets folder's Advanced Attributes screen's **For fast searching, allow Indexing Service to index this folder** check-box is checked. To access this screen, click the **Advanced** button on the *siteroot*/Assets folder properties screen.  2. Check the priority of the database table. See "Checking the Priority of the Database Table" on page 463
Indexing service uses too much memory or resources. Or, too many instances of cidaemon.exe are running.	Check the number of catalogs being serviced. To do so, follow these steps. 1. Go to **Computer Management > Services and Applications > Indexing Service**. 2. You should see three **Ektron CMS400.NET** catalogs (Public, Private, and Content), plus System and Web. **Ektron CMS400.NET** does not use the system and Web catalogs, so unless your server uses them for another purpose, delete them. 3. Delete any other unused catalogs. 4. Restart the Microsoft Indexing Service.
The catalog size is growing too quickly, or is really huge	The indexing service generates an abstract for each content item. See "Query Language" on page 446. By default, the abstract length is 320 characters. To reduce the catalog size, reduce the abstract length. See "Adjusting the Length of the Search Result Abstract" on page 415
Catalog is mistakenly deleted or corrupted	Recreate it. See "Recreating a Catalog" on page 395

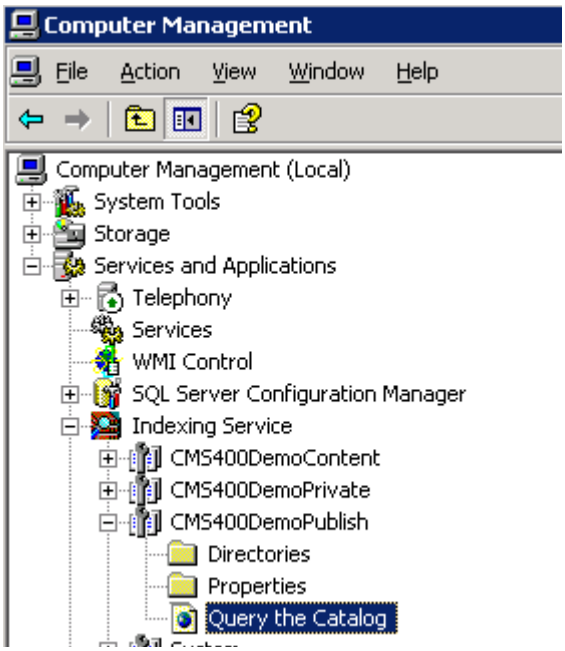
Problem	Solutions
The **Inheritable Settings** checkboxes are not checked	Make sure the **Inheritable Settings** checkboxes on the **Generation** tab of the Properties dialog are checked. 1. Go to **Computer Management > Services and Applications > Indexing Service**. 2. Select the first of the three **Ektron CMS400.NET** catalogs (Public, Private, and Content). 3. Right click the mouse and select **Properties**. 4. Click the **Generation** tab. 5. Make sure the two checkboxes are checked (illustrated below).  6. Repeat for the other two catalogs.
Verify that Windows can find files on your server	1. Open Windows Explorer. 2. Right click your C drive and select **Search**. 3. In the **All or part of the file name** field, enter ***.***. 4. The search should find all files on your computer. If it does not, ask your system or network administrator to help you determine why your Windows search is not working. For example, he should verify that you have permission to search for files.
SearchConfigUI.exe crashes while building search indexes and catalogs	1. Make sure the metaconfig.doc file exists in the `siteroot/uploadedfiles` directory. If it does not, ask Ektron Technical Support to send you a new file. 2. If anyone uploaded Visio documents to your server, make sure the iFilter is installed. See "Installing the Visio IFilter" on page 445.

Problem	Solutions
MS Indexing Service cannot find files in the *siteroot*/assets folder.	1. Open Windows Explorer. 2. Navigate to the *siteroot*/assets folder. 3. Select the folder and right click the mouse. 4. Select **Properties**. 5. Click the **Advanced** button. 6. Check the box next to **For faster searching, allow Indexing Service to index this folder**.  7. Press **OK**.
Get error message. **An unhandled exception has occurred: The type initializer for Ektron.CMS. WebSearch.Manager threw an exception.0**	During installation, the user might have canceled the database setup. Check the following. 1. Check the site root folder for the following folders. If they do not exist, create them. •PrivateAssets •Assets •UploadedFiles •UploadedImages 2. Make sure MetaConfig.doc exists in the *[sitepath]*\UploadedFiles folder. If it does not, ask Ektron Technical Support for a copy of that file from the same **Ektron CMS400.NET** version. 3. Make sure noise.enu file exists in the *[sitepath]* folder. If it does not, look in the *[sitepath]*\workarea folder. If noise.enu is there, copy it to the *[sitepath]* folder. If you cannot find noise.enu, ask Ektron Technical Support for a copy of that file from the same **Ektron CMS400.NET** version. 4. Check the following registry key: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\ContentIndexCommon. For that key, make sure **DefaultColumnFile** has the value C:\WINDOWS\system32\FriendlyNamesDefinitionFile.txt. If the entry does not exist, create it and set the value as listed above.

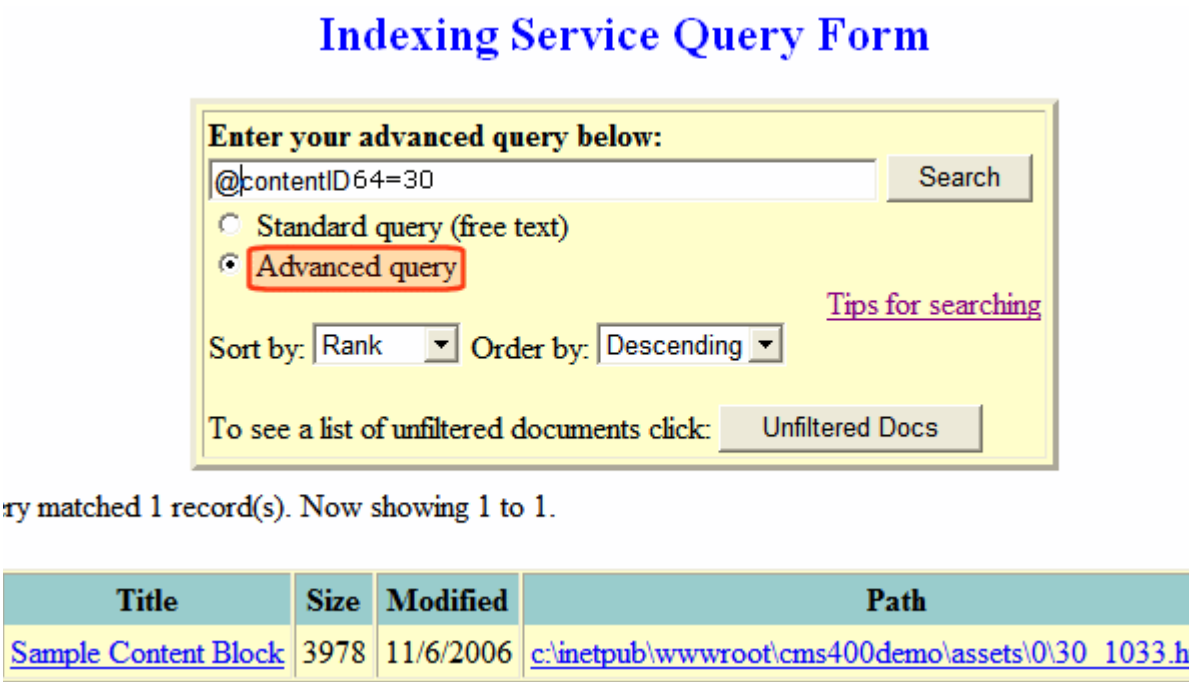
Querying the Catalog for the Content

To query the catalog for a content item, follow these steps

1. Go to **Computer Management > Services and Applications > Indexing Service > sitenamePublishedAsset > Query the Catalog**.



2. Choose **Advanced Query**.
3. Use the syntax `@contentID64=`*`IDnumber`*. For example, if the content ID is 30, enter `@contentID64=30`.

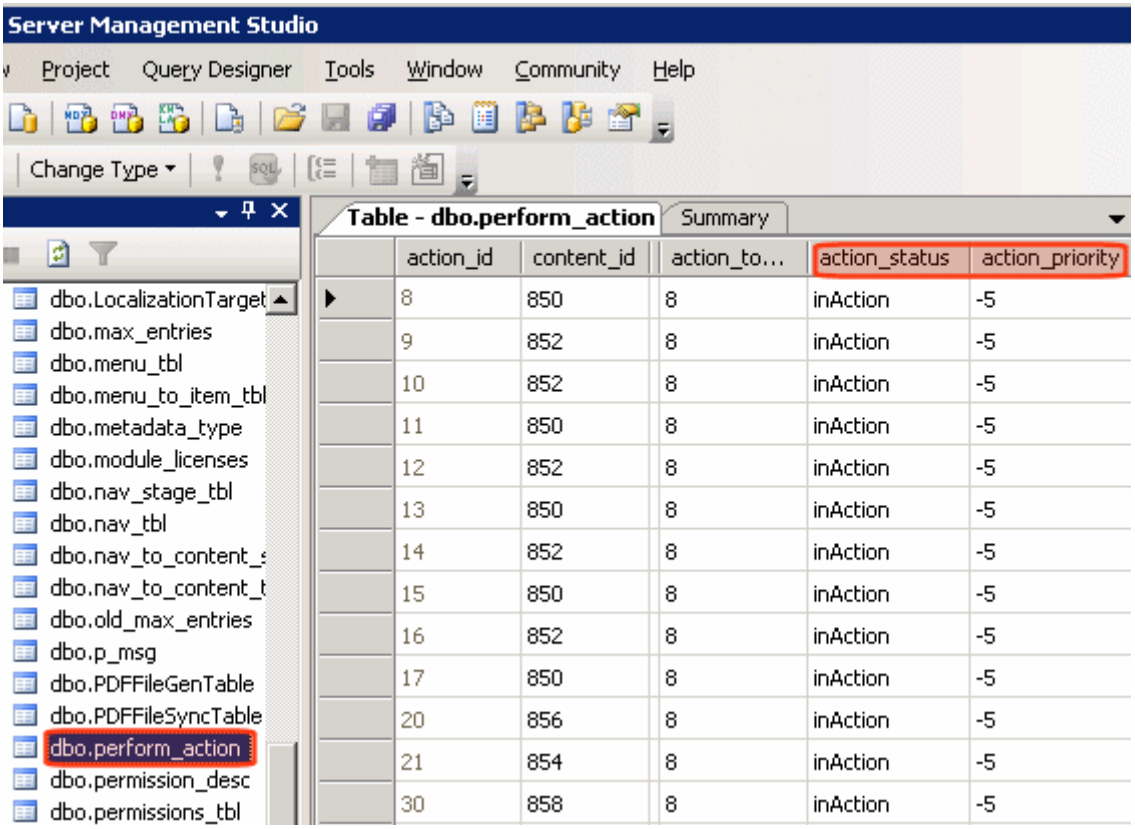


4. The content should appear as shown above.

Checking the Priority of the Database Table

To check how your database is processing the documents, follow these steps.

1. Launch a database management tool, such as SQL Server Management Studio.
2. Find the **Ektron CMS400.NET** database.
3. Open **Tables > dbo.perform.action**.
4. A list of content blocks being processed appears.



5. Make sure the **action_priority** for each item is less than -8. If that is the case, the database will process the record.

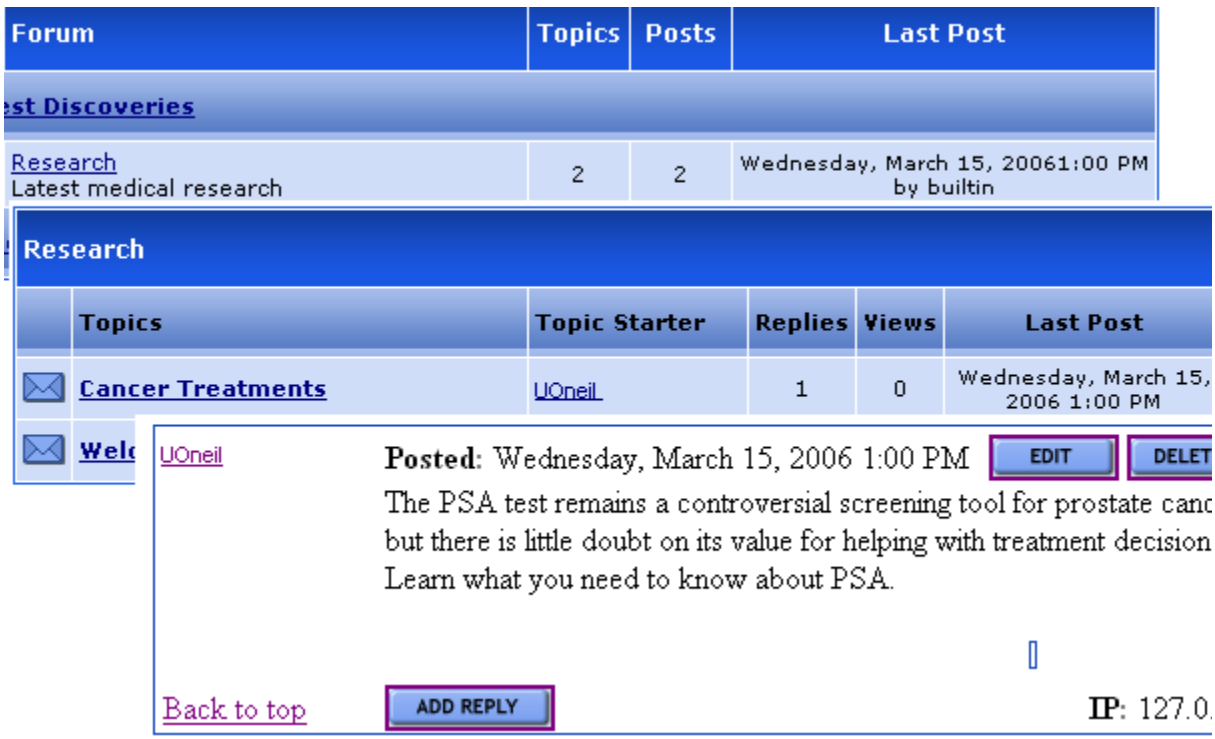
   If the priority is -8 and the action status is **inAction**, there is a problem with the service that processes the document. To resolve the problem, you can

   - go to **Computer Management > System Tools > Error Log** to find any errors and fix them
   - reset the **action_priority** value to zero (0) and the action status to **PerformAction**
   - contact Ektron Support

Discussion Boards

The Discussion Board feature provides an opportunity for topic discussions on your Web site. A site or membership user with Add Topic permission creates a topic and posts a starter question. Site visitors can then reply. *See Also:* "Discussion Board Permissions" on page 517.

An example of a Discussion Board is below. As you can see, the first screen has general topics, the second screen's topics are more specific, and a third screen displays posts to the forum.



As an administrator, you can determine the following Discussion Board features.

- The subjects being discussed
- A starter post, which initiates a discussion
- If users must sign in before posting to the forum
- If a post appears as soon as someone submits it, or must be approved first
  - If a post requires approval, you can edit or delete it before it appears

Whether or not posts must be approved, anyone with permission to the board can perform the following tasks on a post from the Workarea

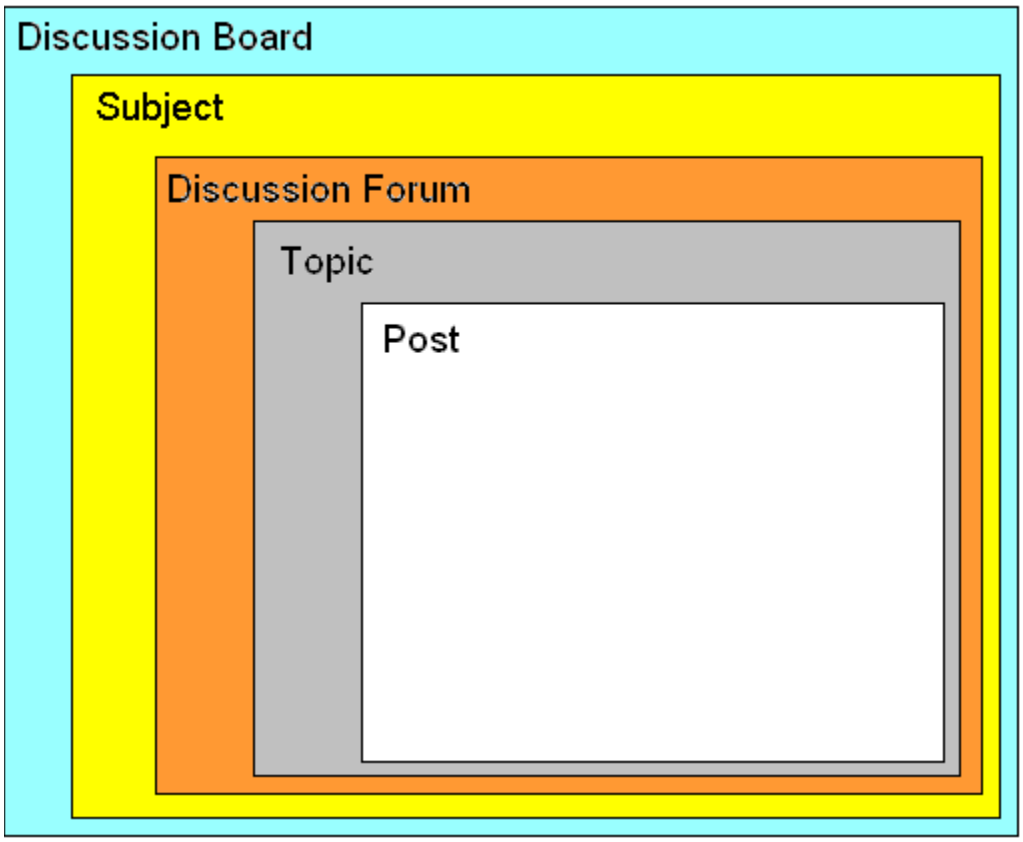
- edit
- delete
- reply

This section explains Discussion Boards through the following topics.

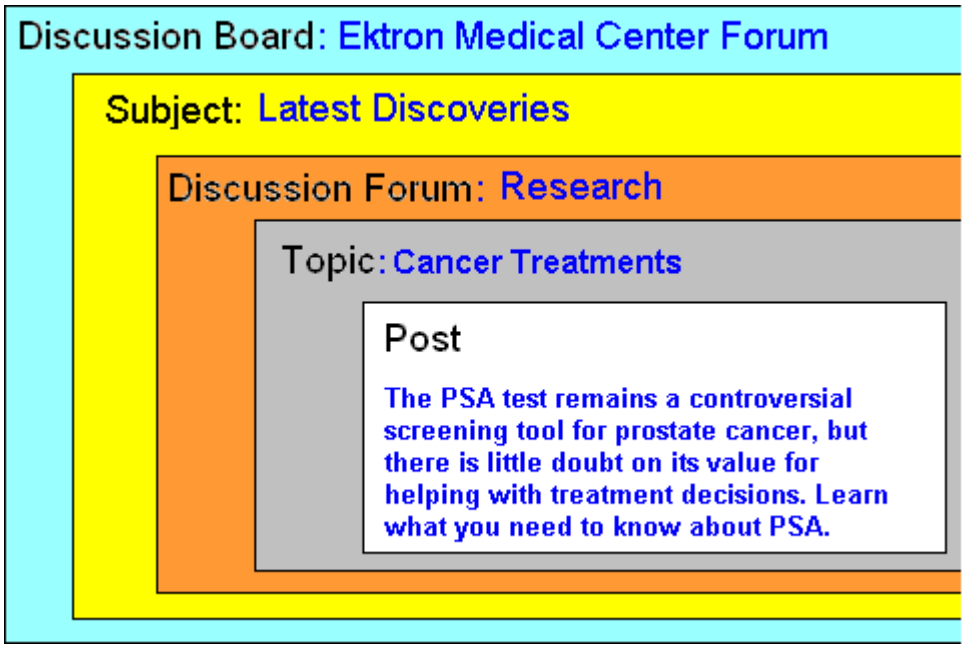
- ”Hierarchy of Discussion Board Elements” on page 466
- ”Implementing Discussion Boards” on page 470
- ”Assigning Permissions to a Discussion Board” on page 514
- ”Sending Notifications When a New Forum Topic or Post is Created” on page 522
- ”Inserting Discussion Board Server Controls” on page 525
- ”Using Discussion Boards on Your Web Site” on page 526

Hierarchy of Discussion Board Elements

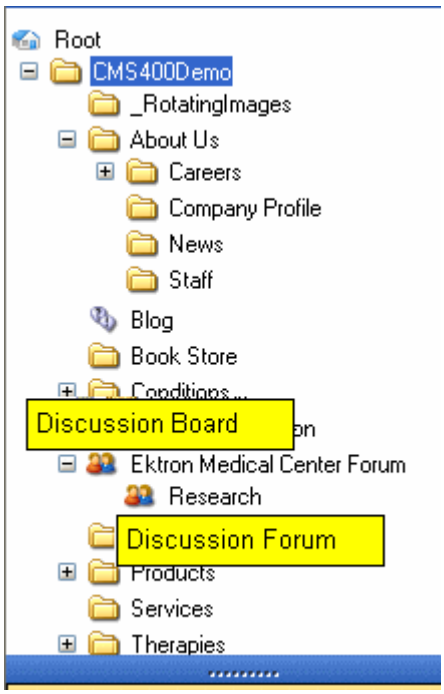
A Discussion Board consists of a five-level hierarchy, illustrated below. Before creating a Discussion Board, it is important to understand the elements of the hierarchy.



Ektron CMS400.NET supports an unlimited number of Discussion Boards. Each board must follow the hierarchy. Below is the hierarchy with sample data, to explain how each element is used.

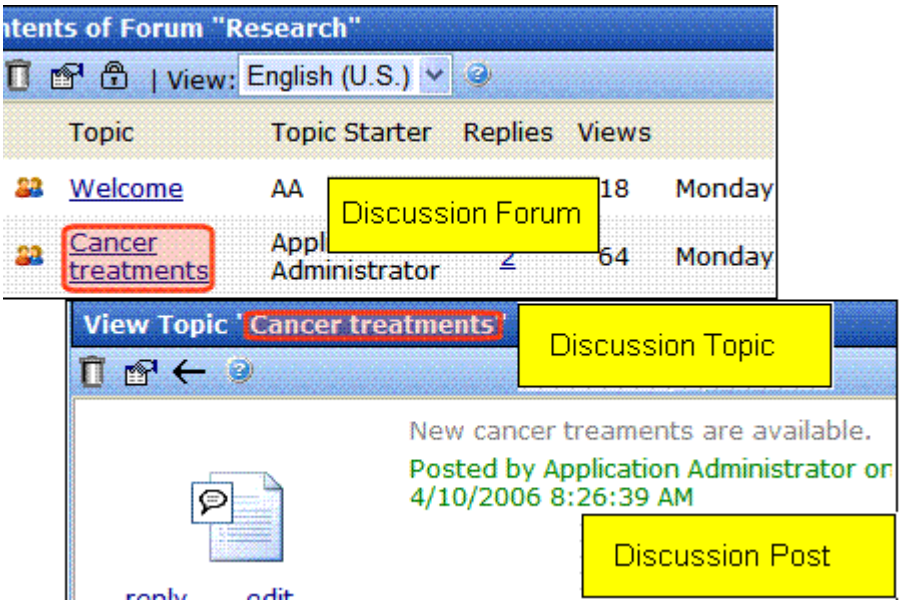

Discussion Board: Ektron Medical Center Forum
Subject: Latest Discoveries
Discussion Forum: Research
Topic: Cancer Treatments
Post
The PSA test remains a controversial screening tool for prostate cancer, but there is little doubt on its value for helping with treatment decisions. Learn what you need to know about PSA.

Within the Workarea, Discussion Boards appear as top-level folders in the folder structure. Forums appears under them. Both folders use the people icon ( ) to distinguish them from content and blog folders.



If you click a Discussion Board, you see its Subjects and Forums on the right side of the Workarea, as shown below.

If you click a Discussion Forum, you see its topics. If you click a topic, you see its posts, as shown below.



Implementing Discussion Boards

To implement a Discussion Board into your Web site, place a Forum server control on a Web page. Then, select a Discussion Board.

All Subjects and Forums within that board appear on the Web page. You cannot selectively suppress Subjects or Forums. Keep this in mind when determining the contents of a Discussion Board.

This is more fully explained through the following topics.

- "Working with Discussion Boards and Subjects" on page 471
- "Ranking Forum Users" on page 485
- "Working with Forums" on page 482
- "Working with Topics" on page 490
- "Working with Posts" on page 499
- "Changing Page Size for Discussion Boards" on page 478
- "Replacing Words in a Post" on page 505
- "Restricting an IP Address" on page 511

- ”Setting Up Post Reporting” on page 513

Working with Discussion Boards and Subjects

This section contains the following topics.

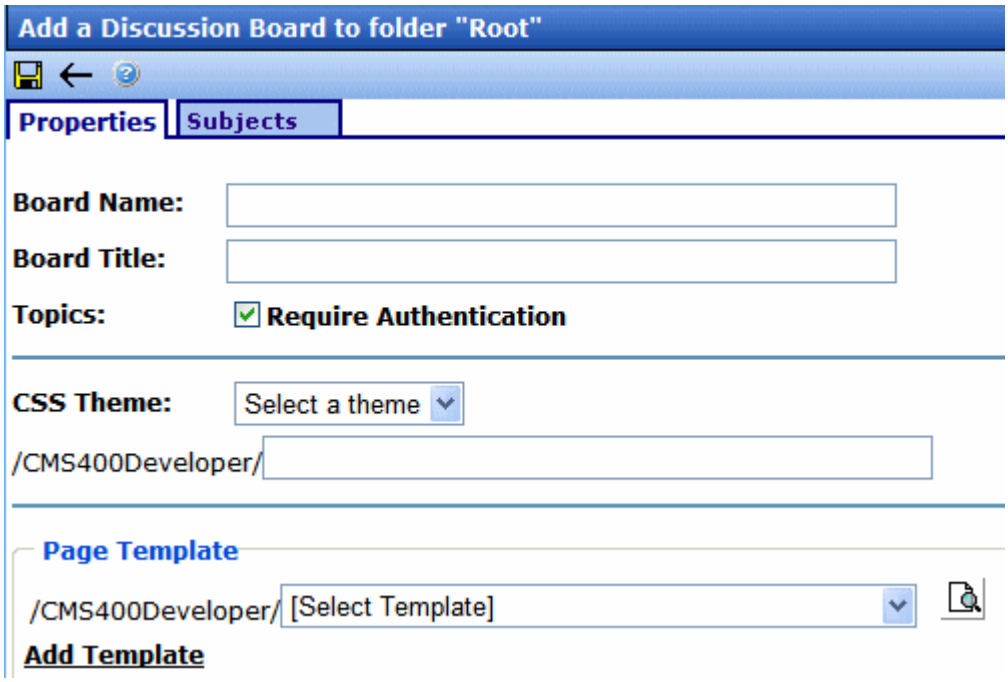
- ”Creating a Discussion Board” on page 471
- ”Viewing a Discussion Board” on page 477
- ”Editing a Discussion Board” on page 477
- ”Deleting a Discussion Board” on page 477
- ”Changing Page Size for Discussion Boards” on page 478
- ”Editing Subject Name and Sort Order” on page 478
- ”Creating a New Subject” on page 479
- ”Terms & Conditions” on page 479

Creating a Discussion Board

To create a Discussion Board, follow these steps.

1. From the Workarea’s **Content** tab, navigate to the folder in which you want to place the Discussion Board.
2. Click **New > Discussion Board**.
3. The **Add a Discussion Board to folder** screen appears.

.

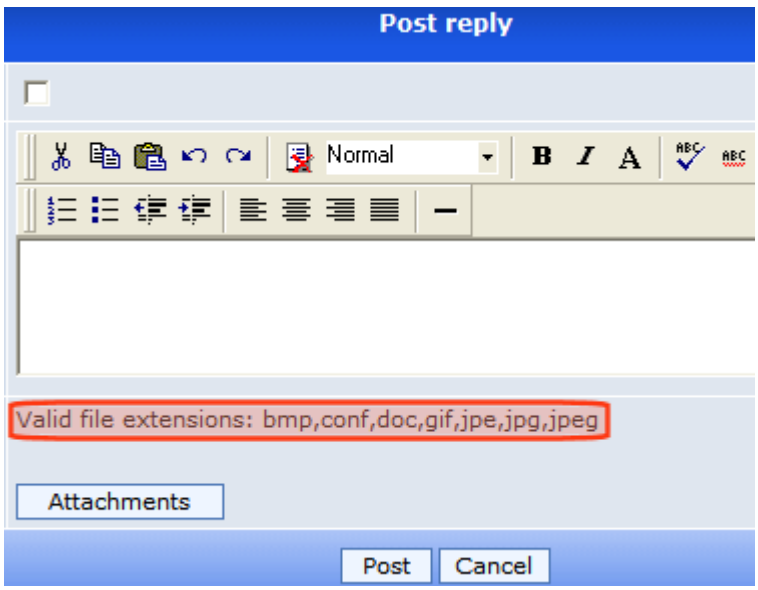


Complete the screen using the following table.

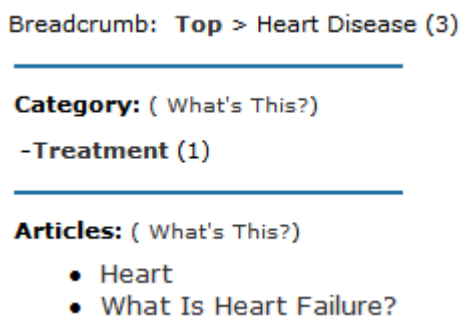
NOTE Some items in this table only appear when editing an existing Discussion Board's properties.

Discussion Board Properties

Field	Description	When Available
Board Name	Enter the name of the Discussion Board. This text describes the board within the Workarea and on your Web site.	Enter or edit
Board Title	Enter the title of the board.	Enter or edit

Field	Description	When Available
Accepted HTML	A comma-delimited list of HTML tags allowed in the editor. When left blank, all tags are available. The default list is: `br,hr,b,i,u,a,div,ol,ul,li,blockquote,img,span,p,em, strong,font,pre,h1,h2,h3,h4,h5,h6,address,embed` Site visitors posting to the forum can apply these HTML tags to content when their Forum editor is **eWebEdit400**, as set in the user profile. **Note:** You must add the **embed** tag if you want users to be able to insert WMV files into their posts. *See Also:* "Adding Video to a Post" on page 533.	Enter or edit
Accepted Extensions	A comma delimited list of file extensions that can be uploaded. You can enter the extension with or without the period (.). Use a comma to separate each extension. The default list is: `bmp,conf,doc,gif,jpe,jpeg,jpeg,png` The list appears at the bottom of the editor screen to notify the person entering a post which file types he can attach. 	Edit only
Max File Size	The maximum size of a file, in bytes, that a user can upload. The default is 200000 bytes (.19 megabytes).	Edit only

Field	Description	When Available
Topics: Require Authentication	**Effect of this Field on the Web Site** Check this box if a site visitor must sign in before he can post to the Discussion Board. If the user cannot access a login screen, he cannot post. If this box is unchecked, site visitors can post without signing in. **Effect of this Field within the Workarea** If this field is checked, only users with Add Topic or Edit Topic permissions for the Discussion Board can create or reply to posts. *See Also:* "Assigning Permissions to a Discussion Board" on page 514	Enter or edit
Lock	Check this box if you want to prevent all posting to this Discussion Board. You can do this temporarily or permanently. If a Board is locked, only Administrator user group members can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea. You can alternatively lock any Forum underneath this Board via the Forum properties screen.	Edit only
CSS Theme	Choose a style sheet to determine the appearance of the Discussion Board on your Web site. Select any theme available in the CSS Theme dropdown. The default is `site root/Workarea/threadeddisc/themes/standard.css`. Alternatively, enter a path below the site root folder to your custom CSS file in the path box. **Note**: If you edit a CSS file, Ektron recommends saving it under a new name. This prevents your changes from being overwritten during an upgrade. For additional information on creating custom themes, see the Developer Manual section "Discussion Board Server Controls" > "Forum Server Control" > "Using a Custom Theme."	Enter or edit
Page Template	Lets you specify a template for the Forum. If you do not specify a template, the search results do not link properly to the Forum. *See Also:* "Creating/Updating Templates" on page 70 To preview what the Forum looks like within the selected template, click the preview icon to the right ( ).	Enter or edit

Field	Description	When Available
Taxonomy: Required category selection	If you want all topics in this Discussion Board to be assigned a taxonomy category, check **Required category selection**. If you do, a signed-in user is prompted to select a taxonomy category when creating a topic. This checkbox has no effect when creating new topics within the **Ektron CMS400.NET** Workarea. *See Also:* "Taxonomy" on page 642	Edit only
Taxonomy: *All taxonomies appear*	Select a taxonomy whose categories will be assigned to Forum topics. The Taxonomies are created in the Taxonomy Module. The Discussion Board's taxonomy display represents another way to organize the Forum's posts. *See Also:* "Taxonomy" on page 642 **Effect of Assigning Taxonomy Categories to a Topic** When a Discussion Board server control is placed on a Web page, its display includes a small taxonomy icon (circled below). When a site visitor clicks this icon, he sees all taxonomy categories. When he selects a category, he sees its subcategories followed by all Forum posts assigned to that category. Below is an example of how a Discussion Board's posts might be organized by taxonomy category.  *See Also:* "Using the Taxonomy Search" on page 686	

Field	Description	When Available
Subjects Tab	Enter as many Subjects as you wish. Each Subject contains one or more Discussion Forums. You *must* create at least one Subject for each Discussion Board. To learn how Subjects fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 466. Note: You can also add a Subject by selecting a Discussion Board then selecting **New > Subjects**. **Subject Sort Order** Subjects are the highest level of the hierarchy that appears on your Web site. In the sample Forum below, **Latest Discoveries** and **Patient Care** are Subjects. Subjects appear in alphabetical order unless you use the **Sort Order** field. The **Sort Order** field accepts a number and uses it to arrange the Subjects of a Discussion Board on the Web site. The lowest numbers appear near the top of the page. To access the **Sort Order** field, follow these steps. 1. Save the Discussion Board. 2. Click the Discussion Board in the Workarea. 3. Click **View > Properties**. 4. Click the **Subjects** tab. 5. Modify the number in the **Sort Order** field as needed.	Enter or edit
Terms & Conditions Tab	Add the Terms & Conditions for using the Discussion Board. By entering text in this text box and saving, you activate the Terms and Conditions feature. *See Also:* "Terms & Conditions" on page 479	Edit only

Viewing a Discussion Board

To view a Discussion Board, select it from the Folders display. When viewing the Board, you see all of its Forums. You can click any Forum to see details about it.

See Also: ”Implementing Discussion Boards” on page 470; ”Discussion Boards” on page 465

Editing a Discussion Board

When editing a Discussion Board, you can change information entered when it was created plus additional fields only available when editing. See the **When Available** column of the ”Discussion Board Properties” on page 472.

To edit a Discussion Board, follow these steps.

1. Click the Workarea’s **Content** tab.
2. Form the folder structure in the left frame, click the Discussion Board.
3. Click **View > Properties**.
4. Click the Edit button ( ).
5. Update the screen as needed. Fields are described in ”Discussion Board Properties” on page 472.
6. Click Save ( ).

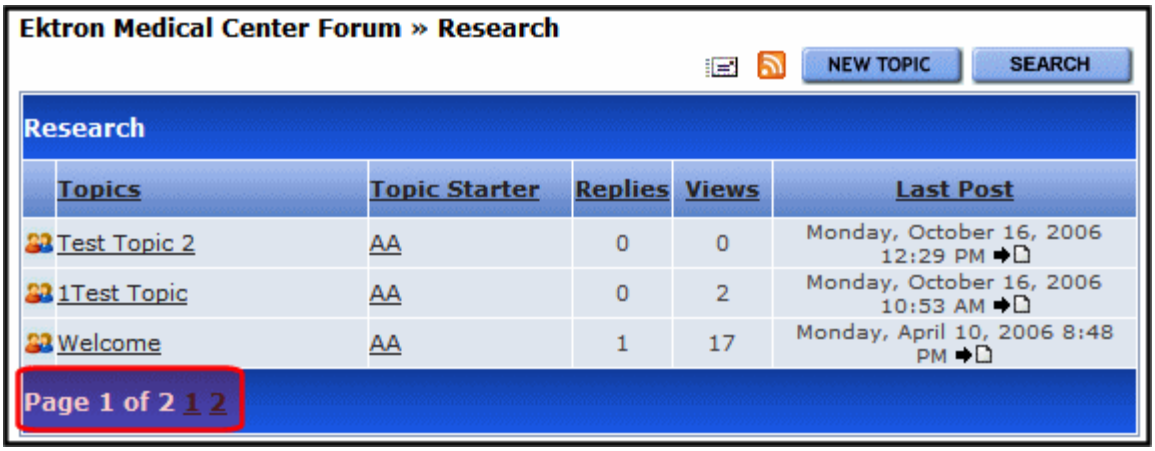
Deleting a Discussion Board

You can delete any Discussion Board. When you do, its Subjects, Forums, and posts are also deleted. Once deleted, they cannot be retrieved.

1. Click the Workarea’s **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board.
3. Click **Delete > This folder**.
4. A message appears asking you to confirm.
5. Press **OK** If you are sure.

Changing Page Size for Discussion Boards

You can change the number of Topics or Posts shown on a page by changing the `ek_PageSize` value in the Web.config file.

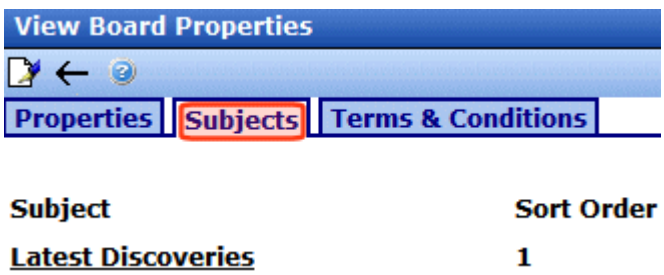


See Also: The `ek_PageSize` property description in the Ektron CMS400.NET Setup Manual section “Managing the web.config File” > “Settings in the web.config File” > “Miscellaneous Settings.”

Editing Subject Name and Sort Order

You can change any Subject’s name or sort order. To do so, follow these steps.

1. Click the Workarea’s **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board that contains the Subjects.
3. Click **View > Properties**.
4. Click the **Subjects** tab.



5. Click the Subject that you want to edit.
6. The current Subject name and sort order appear on a new screen. Edit as needed. *See Also:* "Subject Sort Order" on page 476.
7. Click Save ( ).

Creating a New Subject

Use this procedure when you want to add a new Subject to a Discussion Board.

NOTE For more information about how Subjects fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 466.

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board to which you want to add a Subject.
3. Click **New > Subject**.
4. Enter a Subject name and sort order. *See Also:* "Subject Sort Order" on page 476
5. Click Save ( ).

Terms & Conditions

Adding Terms & Conditions to a discussion board allows you to convey to a user the expectations when using the discussion board. Once Terms & Conditions are added, users can only post to the Forum after agreeing to the Terms.

Once any text is entered into the Terms & Conditions editor and saved, anyone posting to the site sees the following screen the first time he tries to post or reply to a Forum. The circled text is an example of your entry in the Terms & Conditions editor. The rest of the text, checkbox, and button are provided by **Ektron CMS400.NET**.

Ektron Medical Center Forum » Research » Cancer treatments
Post A Reply
In order to proceed, you must agree with the following rules:
Use of this Site constitutes agreement with the following terms and conditions: The Forum administers this Site.Unless expressly stated otherwise, the findings interpretations and conclusions expressed in the materials in this Site are those of the various authors of the work and are not necessarily those of The Forum's staff or Board...
I have read and agree to abide by the forum rules.
Continue

When new Membership users are added, you can have them accept the Terms & Conditions during registration. This is explained in the “Membership Server Control” section of Developer manual.

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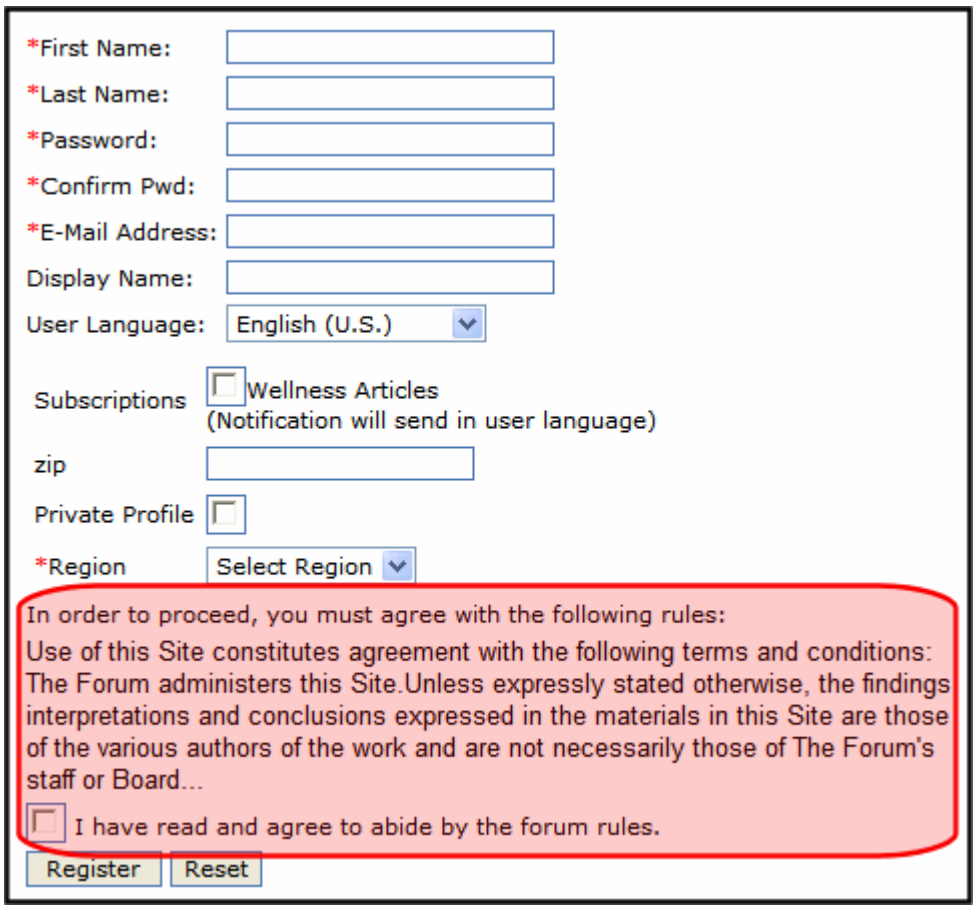

*First Name:
*Last Name:
*Password:
*Confirm Pwd:
*E-Mail Address:
Display Name:
User Language:
English (U.S.)
Subscriptions
Wellness Articles
(Notification will send in user language)
zip
Private Profile
*Region
Select Region
In order to proceed, you must agree with the following rules:
Use of this Site constitutes agreement with the following terms and conditions: The Forum administers this Site.Unless expressly stated otherwise, the findings interpretations and conclusions expressed in the materials in this Site are those of the various authors of the work and are not necessarily those of The Forum's staff or Board...
I have read and agree to abide by the forum rules.
Register
Reset

Adding Terms and Conditions to a Discussion Board

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board to which you want to add terms and conditions.
3. Click **View** > **Properties**.
4. Click the Edit button ( ).
5. Click the **Terms & Conditions** tab.
6. Add the terms and conditions text to editor.
7. Click the Save ( ) button.

Working with Forums

A Forum is a particular thread within a Discussion Board. To learn about how Forums fit into the Discussion Board hierarchy, see ”Hierarchy of Discussion Board Elements” on page 466.

For each Forum, you define the following:

- name and Description
- whether posts to it must be approved before appearing on your Web site
- if it’s accepting new postings
- its sort order, which determines its sequence on the Web page within its Subject
- its Subject

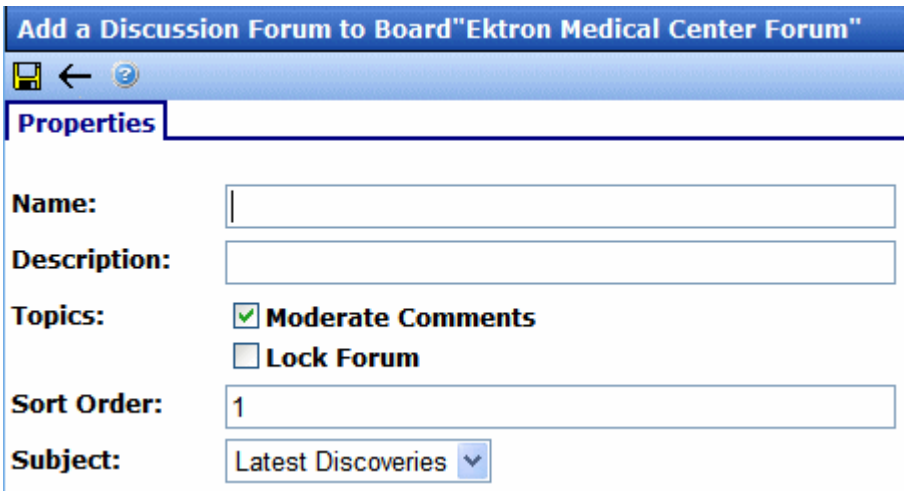
This section contains the following topics.

- ”Creating a Forum” on page 482
- ”Editing a Forum” on page 484
- ”Deleting a Forum” on page 485
- ”Ranking Forum Users” on page 485

Creating a Forum

You can only create a Forum after a Discussion Board and at least one Subject have been created.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board.
3. Click **New > Discussion Forum**.
4. The **Add a Discussion Forum to Board** screen appears.



Complete the screen using the following table.

Field	Description
Name	Enter the name of the discussion Forum. The name identifies the Forum in the left side of the Workarea. The Forum's name appears next to a people icon ( ). This icon distinguishes it from content and blog folders. It also appears on the Web site (see example below).
Description	Enter a more detailed description of the Forum. The description appears on the Web site, as illustrated above.

Field	Description
Moderate Comments	Checking this box causes • comments to require approval before appearing on the Web site *See Also:* "Approving a Topic" on page 498 • a post to be reported to all moderators of the Forum. *See Also:* "Reporting a Post" on page 532 and "Setting Up Post Reporting" on page 513 Only users who are granted **Moderate** permission can approve comments, thereby allowing them to be published on the site. *See Also:* "Discussion Board Permissions" on page 517 The Smart Desktop has a **Forum Topics and Posts** category. This tells you how many posts currently require your approval before they appear on the site.
Lock Forum	Check this box if you want to prevent all posting to this Forum. You can do this temporarily or permanently. If a Forum is locked, only members of the Administrators user group can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea. A Discussion Board can also be locked. If a board is locked, a message on this screen indicates that. In that case, no posting is allowed to this Forum regardless of this setting.
Sort Order	Enter a number if you want to arrange the sequence of Forums within the Subject. If you do not, Forums appear in alphabetical order within a Subject.
Subject	Enter the Subject within which this Forum will appear on the Web site. To learn more about the relationship of Subjects to Forums, see "Hierarchy of Discussion Board Elements" on page 466.

5. Click Save ( ).

Editing a Forum

Follow these steps if you want to change any information about a Forum.

1. Click the Workarea's **Content** tab.
2. From the folder structure in the left frame, click the Discussion Board that contains the Forum.
3. Click the Forum.

4. Click the View Properties button ( ).
5. Click the Edit button ( ).
6. Update the screen as needed. The fields are described in "Complete the screen using the following table." on page 483.
7. Click Save ( ).

Deleting a Forum

You can delete any Forum. When you do, its topics and posts are also deleted. Once deleted, they cannot be retrieved.

To delete a Forum, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select the Discussion Board that contains the Forum.
3. Click the Forum.
4. Click the Delete Forum button ( ).
5. A message appears asking you to confirm.
6. Press **OK** if you are sure.

Ranking Forum Users

The User Ranking feature lets you recognize users for their Forum contributions. You can create a ranking system that determines the number of posts a user must submit to move up to the next level. Here's an example.

Rank	Number of posts
Newbie	0 - 9
Intermediate	10 - 19
Expert	20 and up

This is known as a *ladder system*, because users move to the next level after a designated number of posts.

This system lets Forum users build credibility. You can assign each rank an image, which appears below the user's name on any post (see illustration below).

The rank also appears on a user's forum profile. *See Also:* "Suppressing User Information from the Forum Profile Display" on page 534

Ranks Independent of the Ladder System

You can also create ranks that are independent of the ladder system. Such a rank bears no relationship to the number of posts a user has made. For example, after a Forum user acquires Ektron Developer Certification, he is assigned the Ektron Developer rank.

Users can be moved from a non-ladder rank to the ladder system and vice versa. Whether or not a user is in a ladder system, **Ektron CMS400.NET** keeps a tally of posts. So, if the user is moved into a ladder system at any time, he is placed into the correct rank.

Adding a User Rank

To add a user rank, follow these steps.

NOTE You can also access the User Ranks screen from Workarea **>** Settings **>** Configuration **>** Discussion Board **>** User Ranks. If you have more than one Forum, this screen lets you pick the Discussion Board to which a rank is assigned.

1. In the Workarea, click the **Content** tab.

2. Select a Discussion Board.
3. Click **New** > **User Ranks**.
4. The User Ranks screen appears.

5. Complete the screen using the following table.

Field	Description
Name	The name of the rank. For example, Newbie, Expert, Developer, or Associate.
Rank Image	Click the upload link to browse and select an image to upload. Once uploaded the path where the image is stored appears in the text box. Images are optional. If you assign an image, it appears below the user's name on any post.
Ladder System	Check this box if this rank is part of a *ladder system*. That is, a rank based on the number of posts a user has submitted to this Discussion Forum. If you uncheck **Ladder System**, both **Starting Rank** and **Number of Posts** become inactive, since those fields set up and manage the ladder system.

Field	Description
Starting Rank	If you are using a ladder system, use this check box to designate this rank the Starting Rank. A user is assigned to this rank when he submits the first post. A Discussion Forum can only have one Starting Rank. Also, If this is the Starting Rank, you cannot enter a number of posts.
Number of Posts	Enter the number of posts it takes to reach this rank. If the **Starting Rank** check box is checked, the number is 1 and cannot be changed.
Applies To	If you accessed this screen from **Workarea > Settings > Configuration > Discussion Board > User Ranks**, use this field to select the Discussion Forum to which this rank applies.

6. Click the Save button ( ).

Deleting a User Rank

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board.
3. Click **View** > **User Ranks**.
4. Select the rank you want to delete.
5. Click the delete ( ) button.
6. Press **OK** to the confirmation message.

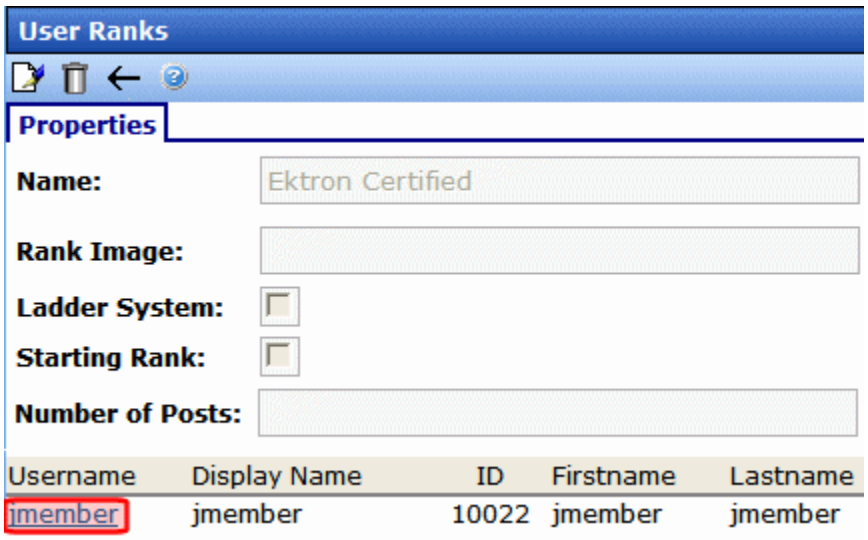
Changing a User's Rank

In order to change a user's current rank, you must know it. As mentioned above, a user's rank appears below the user name on any post he has made.

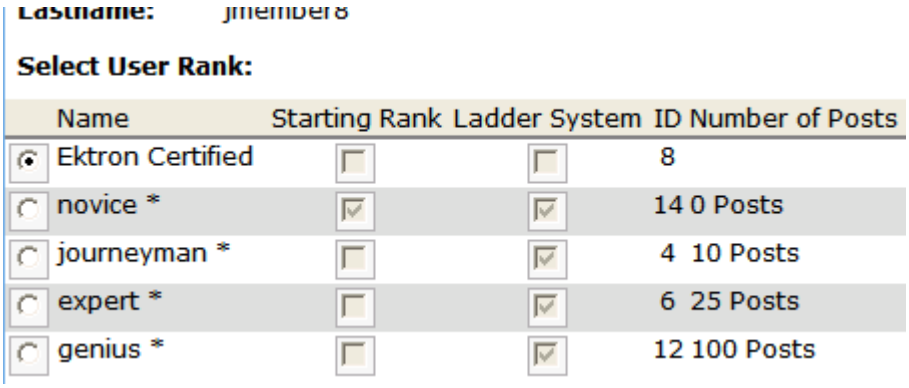
You can only move a user into and out of a ladder system. You cannot change his rank within a ladder system -- that is determined by the number of posts.

To change a user's rank, follow these steps.

1. In the **Ektron CMS400.NET** Workarea, go to **Content** and navigate to the forum to which the user has posted.
2. Click **View > User Ranks**.
3. Select the rank that you want to move the user out of.
4. The User Ranks screen appears. The lower half shows all users assigned that rank.



5. Click the user that you want to move out of the rank.
6. The screen display all ranks. The current one is selected.



7. Click next to the desired rank.
8. Click the Save ( ) button.

Working with Topics

Topics are specific issues to be discussed in a Forum. For example, in a medical research Forum, a topic might be New Cancer Treatments. Topics can only be started within the Workarea.

Before creating a topic, you must create a Forum into which to place it. To learn more about how Topics fit into the Discussion Board hierarchy, see "Hierarchy of Discussion Board Elements" on page 466.

This section contains the following topics:

- "Adding a Topic to a Forum" on page 491
- "Setting and Changing the Topic Priority" on page 493
- "Locking a Topic" on page 494
- "Viewing a Topic" on page 495
- "Editing a Topic's Title" on page 497
- "Approving a Topic" on page 498
- "Deleting a Topic" on page 498

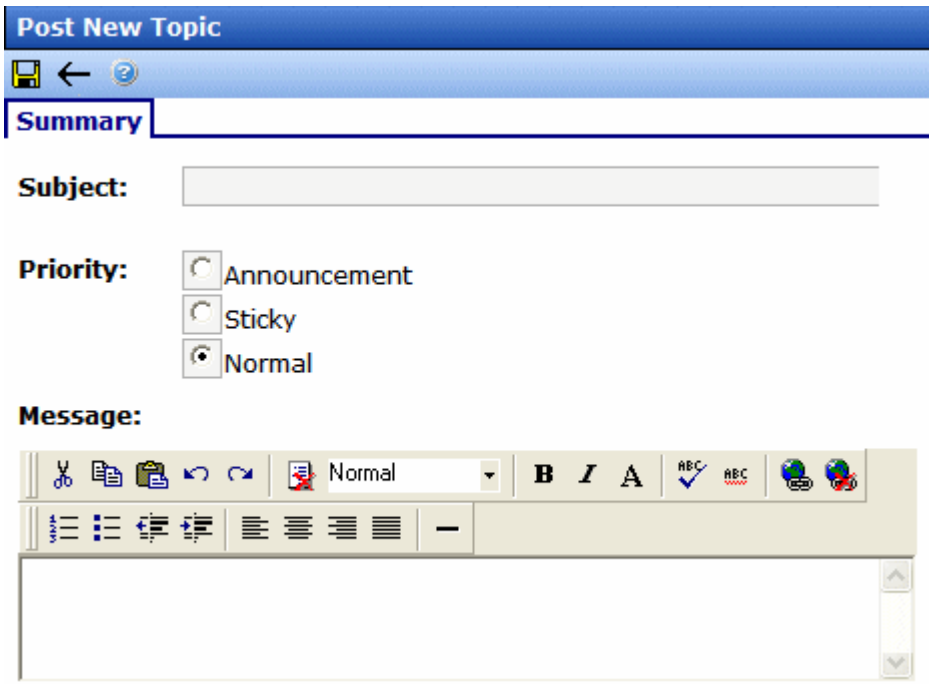
Adding a Topic to a Forum

When a new Topic is created, the first post is created from the message of the Topic.

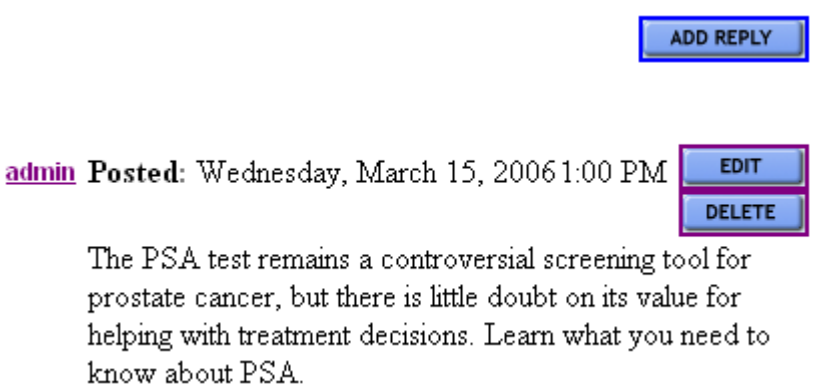
To create a Topic, follow these steps.

NOTE If the user adding the Topic is not a Forum moderator, that user does not see the Topic in the workarea until it is approved. *See Also:* "Approving a Topic" on page 498.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. Click the New Topic button ( ).
4. The Post New Topic screen appears.



5. Complete the screen using the following table.

Field	Description
Subject	Enter a short description of the topic. The Topic Subject appears on the Forum page, as shown below.
Priority	Set the priority level for the topic. This determines where the topic appears in the topic list on the site. The default setting is Normal. *See Also:* "Setting and Changing the Topic Priority" on page 493
Lock	Check this box if you want to prevent posting of replies to this Topic. You can do this temporarily or permanently. If a Topic is locked, only Administrator user group members can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea.
Message	Enter the topic text. This text appears on a new Web page after a Web site visitor clicks a Topic's Subject line. 

6. Click Save ( ).

Setting and Changing the Topic Priority

You can set a topic's priority when creating it. Within a Forum, topics are sorted by priority.

Anyone with Moderate permission can change a topic's priority. To do so, edit a Forum's properties and click the View Properties button ( ).

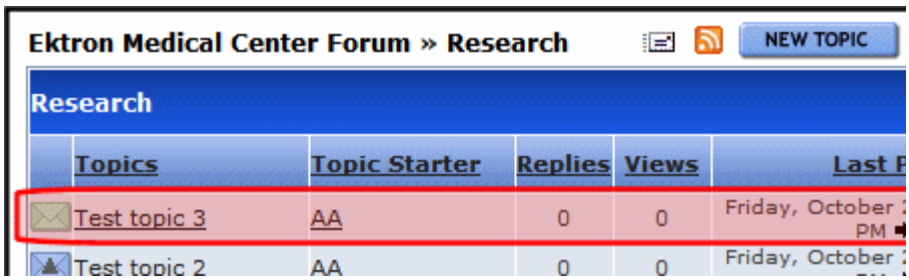
Priority Levels

There are three priority levels:

- Announcement
- Sticky
- Normal

- **Announcement** - topic always appears at the top of the list. If a list has more than one announcement, they are sorted by date with most recent on the top.

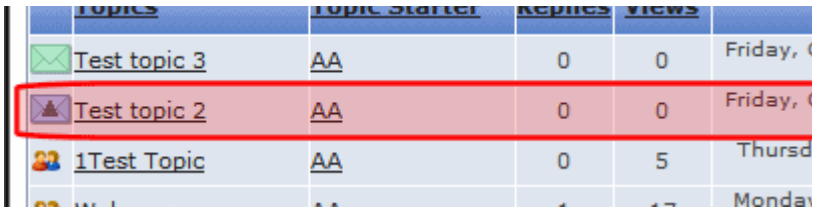
  The Announcement icon ( ) indicates its priority to the left of the title.



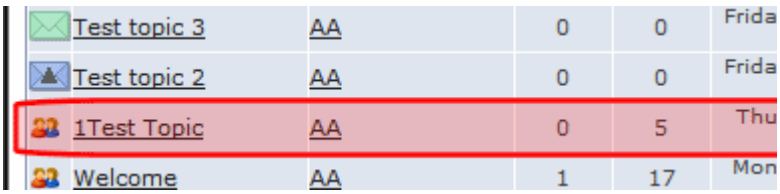
- **Sticky** - topic appears near the top of the list, just below the announcements. If a list has more than one sticky topic, they are sorted by date with most recent on the top.

  The Sticky icon ( ) indicates its priority to the left of the title.

.



- **Normal** - Topics with this priority follow Announcements and Sticky topics. The Normal icon ( ) next to the topic indicates its priority.



Locking a Topic

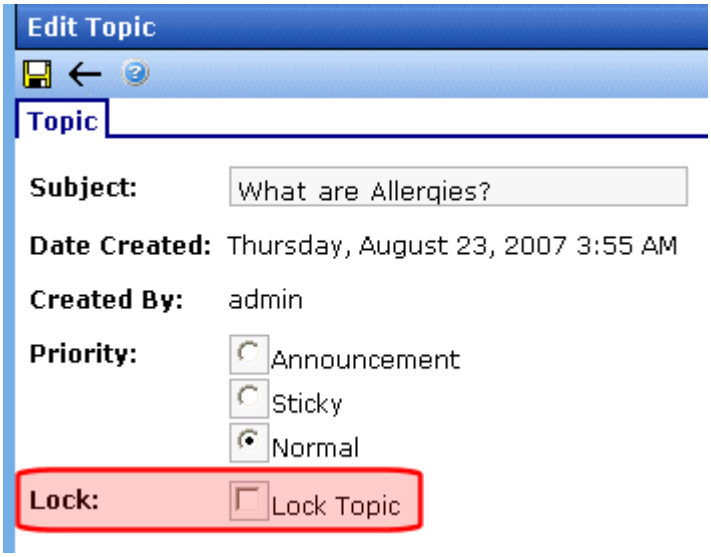
Locking a Forum Topic prevents users from posting a reply to the Topic. For example, you might create an announcement, but don't want people replying to it. Or, you might feel as though a topic has had enough discussion and want to stop further replies.

If a Topic is locked, only Administrator user group members can post to it, or edit or delete posts. Those users can post from the Web site or the Workarea.

To lock a Topic, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. Click a topic.
4. Click the Properties button ( ).
5. Click the **Lock Topic** check box.

NOTE To unlock a topic, remove the check mark from the Lock Topic check box.



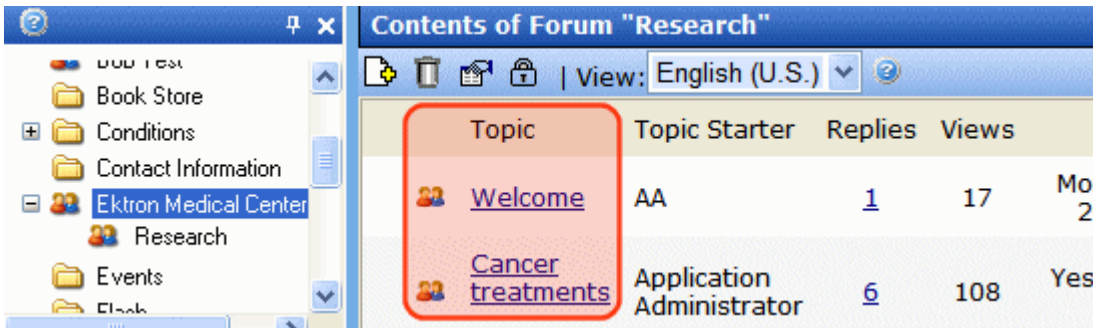
6. Click Save ( ).

Viewing a Topic

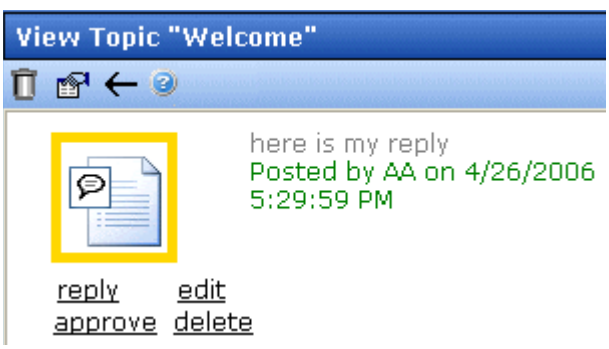
NOTE To learn about viewing a topic from your Web site, see "Using Discussion Boards on Your Web Site" on page 526.

To view a topic from the Workarea, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to view.



The View Topic screen displays each post within the topic. If a post is surrounded by a yellow border (illustrated below), it must be approved before it can appear on the Web site. Only users with Moderate permission can approve a post. *See Also:* "Assigning Permissions to a Discussion Board" on page 514



NOTE A red flag (circled below) to the left of a post on the Content of Forum screen also indicates that posts require a moderator's approval.

The following options may appear across the top of the screen, depending on your permissions.

Button	Description	For more information, see
	Delete topic and all of its posts	"Deleting a Topic" on page 498
	View and edit the topic's title and priority	"Editing a Topic's Title" on page 497
←	Return to previous screen	

Under each post is a set of options that you may be able to perform on any post, depending on your permissions and the status of the post.

If an option is *underlined*, you have authority to perform it. If not, you cannot. For example, if a post's status is approved, the approve option is not underlined because it is already approved.

See Also:

- "Approving a Post in the Workarea" on page 500
- "Adding a Reply to a Post" on page 499
- "Editing a Post" on page 501
- "Deleting a Post" on page 502

Editing a Topic's Title

The only part of topic you can edit is its title.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to edit.
4. Click the View Properties button ( ).
5. The Edit Topic screen appears. Modify the title as needed.
6. Click Save ( ).

Approving a Topic

A topic needs approval when a user without moderate permissions for the Forum adds a Topic.

Moderate permissions are set on a forum's properties screen, at the **Moderate Comments** check box. If that box is checked, only CMS users assigned to the Discussion Board's Permissions screen's **Moderate** column can approve. *See Also:* "Discussion Board Permissions" on page 517

To approve a Topic, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to approve.
4. The View Topic screen appears.
5. Click the Approve Topic button ( ).
6. The Topic is approved.

Deleting a Topic

You can delete any Topic. When you do, its posts are also deleted. Once deleted, they cannot be retrieved.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that you want to delete.
4. The View Topic screen appears.
5. Click the Delete Topic button ( ).
6. A confirmation message appears.
7. Click **OK** if you are sure you want to delete it.

Working with Posts

When a new Topic is created, the first post is created from the message of the Topic. Essentially, all posts to the Topic are replies to the first.

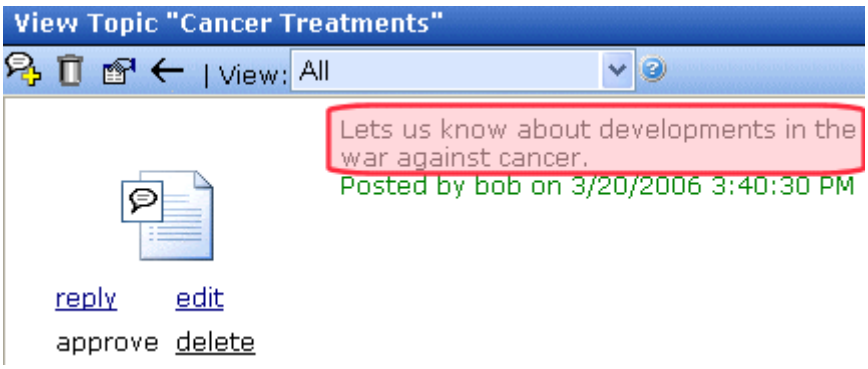
This section contains the following topics, which explain working with posts.

- ”Adding a Reply to a Post” on page 499
- ”Approving a Post in the Workarea” on page 500
- ”Editing a Post” on page 501
- ”Deleting a Post” on page 502
- ”Attaching Images and Files to a Post” on page 502
- ”Searching a Forum’s Posts” on page 504
- ”Moving a Topic and Its Posts to Another Forum” on page 505
- ”Replacing Words in a Post” on page 505
- ”Creating and Editing Emoticons” on page 508

Adding a Reply to a Post

NOTE You can also reply to a post from the Web site. See ”Posting a Reply” on page 528.

1. In the Workarea, click the **Content** tab
2. Select a Discussion Board, then select a Forum from the folder structure.
3. The Forum’s topics appear in the right frame. Click the one that has the post that you want to reply to.
4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post that you want to reply to by reading its text (illustrated below).



6. Click reply.
7. Enter a **Title** for the post.
8. In the **Description** field, enter the text of your post.

Approving a Post in the Workarea

When defining a Forum, you can check the **Moderate Comments** field. If you do, posts to the Forum must be approved before they appear on the Web site. Only users who are assigned the **Moderate** permission are allowed to approve a post. *See Also:* "Discussion Board Permissions" on page 517

You can approve a post from the Workarea or the Forum on the site. See also "Approving a Post" on page 531.

To approve a post in the Workarea, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that has the post that you want to reply to. (Unapproved posts have a red flag in the left column, as illustrated below.)

4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post you want to reply to. Unapproved posts have a yellow border (Illustrated below).

6. Click approve under the post icon.

Editing a Post

You can edit the text of a post but you cannot edit its title.

NOTE You can also edit a post from the Web site. See "Using Discussion Boards on Your Web Site" on page 526.

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.

3. The Forum's topics appear in the right frame. Click the one that has the post that you want to edit.
4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post that you want to edit.
6. Click edit under the post icon.
7. The Edit Reply screen appears. Within the editor, update the text as needed.
8. Click Save ( ).

Deleting a Post

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board, then a Forum from the folder structure.
3. The Forum's topics appear in the right frame. Click the one that has the post you want to delete.
4. The next screen, View Topic, displays all posts to the selected topic.
5. Find the post that you want to delete.
6. Click delete under the post icon.

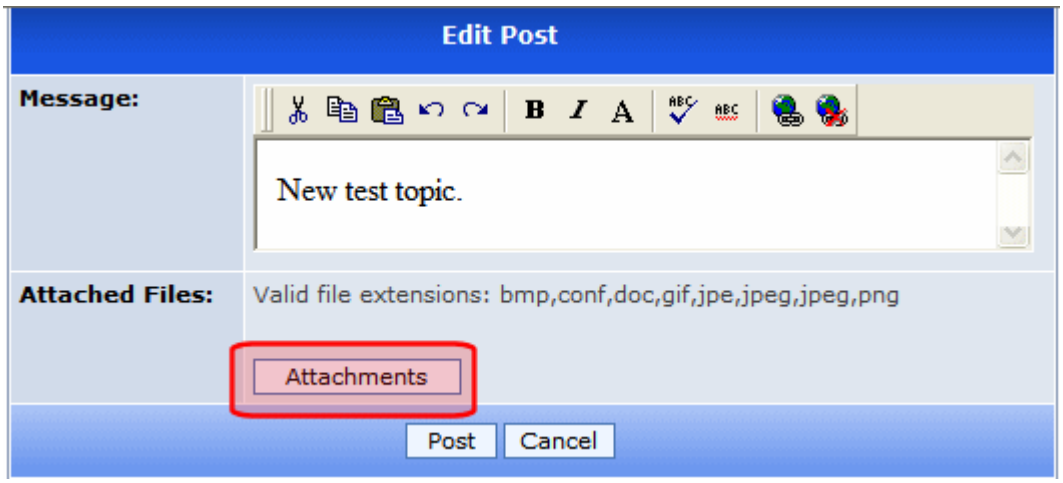
Attaching Images and Files to a Post

When creating a topic or post, you can add an attachment. In the Attached Files field, A list of the files of files that will be attached appears, In addition, a list of valid file extensions appear. The list of valid file extensions and maximum size of the file upload are defined at the Discussion Board level. See "Accepted Extensions" on page 473 and "Max File Size" on page 473.

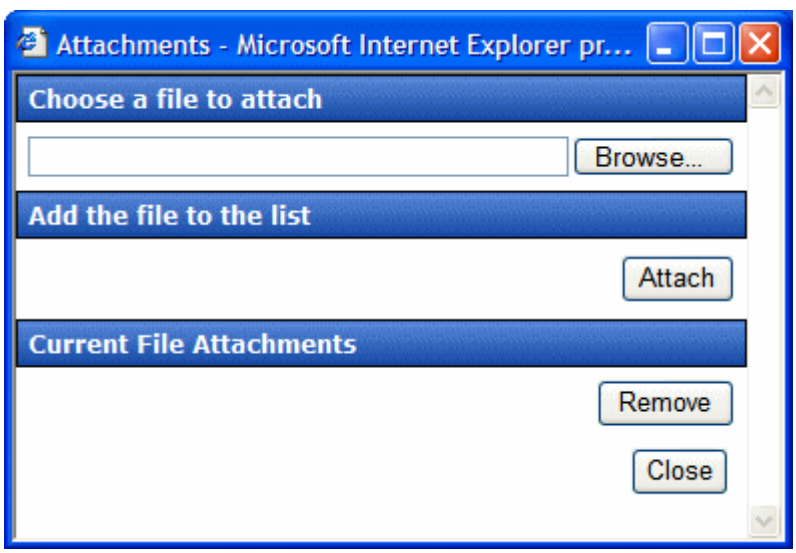
Attaching a File

To add an attachment to a topic or post, follow these steps.

1. Click the **Attachments** button below the editor.



2. The Attachments window appears.



3. Click the **Browse...** button to find the file.
4. Browse to the location of the file and select it.
5. Click **Open**.
6. Click the **Attach** button to attach the file to the post.
7. The file appears in the list of Current File Attachments.

8. Click the **Close** button.

Viewing an Attached File

To view an attached file, click its name in the post.

Removing an Attached File

To remove a file from the list of attachments, follow these steps.

1. Click the **Attachments** button below the editor.
2. Highlight the attached item.
3. Click the **Remove** button.
4. Click the **Close** button.

Searching a Forum's Posts

The Forum server control includes a search feature that lets site visitors search through all posts on your site. Any user can access the search from the Forum screen (see below).

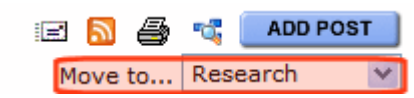
When a site visitor clicks **Search**, he can search the current Forum (the default value), select a different Forum, or search all Forums.

Moving a Topic and Its Posts to Another Forum

If you want to move a topic and its associated posts in one forum to another, follow these steps.

Prerequisite: The forum to which you want to move the topic and posts must exist. See "Creating a Forum" on page 482.

1. Access a page on your Web site that has a login button.
2. Sign in as a member of the Administrators group or as a Moderator of the board.
3. Navigate to a page with Discussion Board.
4. Select a forum from the Discussion Board.
5. Navigate to a topic page.
6. Click the **Move to...** dropdown list. (It appears in the right corner above the posts.)



7. Select the topic to which you want to move.
8. Confirm that you want to move all posts.

Replacing Words in a Post

You can configure Ektron CMS400.NET to replace unwanted words in a post. This feature is useful for changing words that are obscene, indecent, or should not appear on your site. In addition, Replace Words can fix commonly misspelled words. For example, *the* can replace *teh*. *See Also:* "Adding a Replacement Word" on page 507

The Replace Words feature works with exact matches but does not append words. For example, if you replace *car* with *auto*, the sentence *I bought the car from the cartel* becomes *I bought the auto from the cartel*. Note that cartel did not change to autotel even though the word car appears in cartel.

This feature is more fully explained through the following topics.

- ”Using Regular Expressions” on page 506
- ”Adding a Replacement Word” on page 507
- ”Viewing Existing Replacement Words” on page 508
- ”Editing a Replacement Word” on page 508
- ”Deleting a Replacement Word” on page 508

Using Regular Expressions

If you would like the Replace Words feature to modify words that contain a word you do not want used, you can use Regular Expressions. A Regular Expression, often referred to as regex, is a pattern of metacharaters placed around a word that describes a string. Used for string manipulation, regex allows you to detail a succinct description of a group of words without having to detail each word in the group.

Regular Expression	Description
.	Matches any character, similar to a wildcard. For example, .ar matches any three letter word ending in *ar*, such as car, bar, tar or far.
|	Acts as an *or* operator. For example, steak|stake would find steak or stake.
[ ]	Matches one character that is between the brackets. For example, [rst] matches *r*, *s* or *t*. [d-g] matches *d*, *e*, *f*, or *g*. Another example, [bc]ar matches *bar* and *car*. If you need to match a dash (-), use it a the beginning or end of the group. For example, [xyz-] or [-xyz].
[^]	Matches one character that is not in the group. For example, [^rst] matches any character other than *r*, *s* or *t*. Another example, [^bc]ar does not match *bar* or *car*, but does match words, such as *tar* or *far*.
^	Matches the beginning of any line. For example, ^[bc]ar matches *bar* or *car*, but only at the beginning of a line.
$	Matches the end of any line. For example, ^[bc]ar matches *bar* or *car*, but only when it appears at the end of a line.

Regular Expression	Description
( )	Marks a sub expression. For example, alt(a|e)r finds *altar* or *alter*.
*	When an expression is followed by *, it matches zero or more versions of the expression. For example, [rst]* finds *(blank)*, *r*, *s*, *t*, *rs*, *sr*, *rt*, *tr*, *st*, *ts*, *rst*, *rts*, *srt*, *str*, *trs* and *tsr*.
+	When an expression is followed by +, it matches one or more versions of the expression. This differs from * because it does not match *(blank).* It must match at least one character. For example, r+ matches *r, rr*, *rrr* and so on.
{*x*,*y*}	Must match at least *x* times and not more than *y* times. For example, s{2,4} matches *ss*, *sss* and *ssss*. You can also use {*x*} to specify an exact match. For example, s{3} matches *sss*. You can use {*x*,} to specify that the match is at least *x* amount of times. For example, s{4} matches *ssss*, *sssss*, *ssssss* and so on.
?	Must match the preceding character zero or one times. For example, Boa?rder matches *boarder* and *border*.

Adding a Replacement Word

To add a replacement word to a Forum, follow these steps.

NOTE In addition to using Replace Words for a specific Forum, you can access the Replace Word feature from the Workarea **>** Settings **>** Configuration **>** Discussion Board **>** Replace Words. If you have more than one Forum, this allows you select to which Discussion Boards the Replace Words feature is applied.

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **New** > **Replace Word**.
4. The Replace Word screen appears.
5. Add the word to be replaced in the **Old Word** textbox.
6. Add the replace word in the **New Word** textbox.
7. Select the language for the Replace Word.
8. Click the Save button ( ).

Viewing Existing Replacement Words

To view a list of existing words that are replaced, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Replace Words**.
4. A list of word to be replaced appears.

Editing a Replacement Word

1. In the Workarea, click the **Content** tab
2. Select a Forum from the folder structure.
3. Click **View** > **Replace Words**.
4. Click either the Old Word or the New Word to edit.
5. Click the Edit button ( ).
6. Change the Old Word, New Word or Language.
7. Click the Save button ( ).

Deleting a Replacement Word

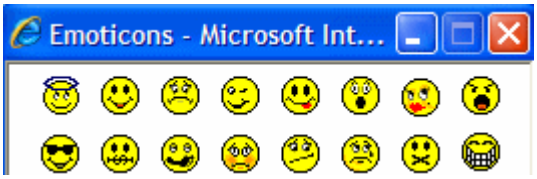
1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Replace Words**.
4. Click either the Old Word or the New Word to delete.
5. Click the Delete button ( ).
6. A dialog box asks if you are sure you want to delete.
7. Click **OK**.

Creating and Editing Emoticons

An emoticon is an icon used to express emotion in a Forum post. For example, .

There are two ways to insert an emoticon.

- A Forum participant clicks the emoticon toolbar button . Next, a small window appears with available emoticons (shown below). The user clicks one to insert it.



- A Forum participant enters a few characters that resemble the image. For example, to insert , the user enters `0:\)`.

  While working in a post, the user only sees the text. But when the post is saved, **Ektron CMS400.NET** converts the text to the corresponding emoticon. In all subsequent work with the post, users see only the emoticon.

"Viewing Emoticons" on page 509 explains how to find the list of available emoticons and the characters used to insert each one.

You can view and modify or delete a standard set of emoticons. You can also create your own.

Inserting Emoticon Images

Place emoticon images in the following folder: `webroot\Workarea\threadeddisc\emoticons`. Administrators reference these files when editing or creating new emoticons.

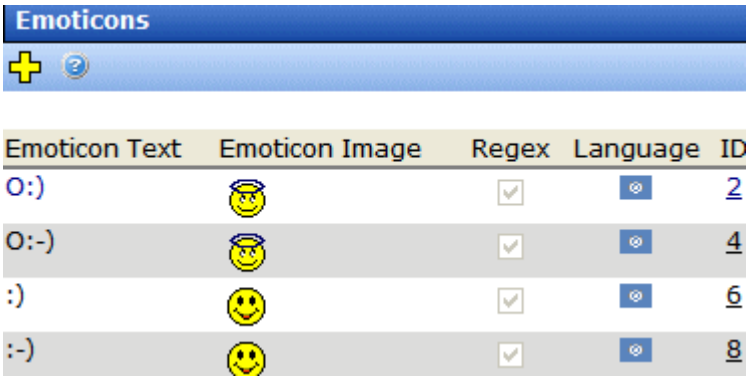
Viewing Emoticons

A standard set of emoticons is supplied with **Ektron CMS400.NET**. After viewing them, you can add new ones as well as delete or modify standard ones.

To see **Ektron CMS400.NET**'s emoticons, follow these steps.

1. Within the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Discussion Boards > Emoticons**.

2. A list of emoticon images and text appears.



Editing Emoticons

To edit an emoticon, follow these steps.

1. Within the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Discussion Boards > Emoticons**.
2. Click the emoticon text or image that you want to edit.
3. Click the Edit button ( ).
4. Use the following table to guide you through the screen's fields.

Fields on the Emoticons Properties Screen

Field	Description
Emoticon Text	Enter or update the characters a Forum participant would enter to insert this emoticon.
Emoticon Image	Enter the name of the image file that will appear after a user enters the above **Emoticon text** and saves the post. Administrators place emoticon images in the *siteroot*\Workarea\threadeddisc\emoticons folder.
Regex	See "Using Regular Expressions" on page 506
Language	Select the emoticon's language from the dropdown list. If a Forum is language-specific, only emoticons assigned to that language or all languages are available.

Deleting Emoticons

To delete an emoticon, follow these steps.

1. Within the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Discussion Boards > Emoticons**.
2. Click the emoticon that you want to delete.
3. Click the Delete button ( ).
4. Reply to the confirmation message.

Creating Emoticons

To create an emoticon, follow these steps.

1. Within the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Discussion Boards > Emoticons**.
2. Click the Add button ( ).
3. Respond to the fields on the screen. See "Editing Emoticons" on page 510.
4. Click Save ( ).

Restricting an IP Address

If you are not using authentication for the Forums and want to block a site visitor from posting to the Forum, you can use the Restricted IP feature to block site visitors from posting to the Forum.

Adding an IP Address the Restricted List

NOTE In addition to using Restricted IPs for a specific Forum, you can access the Restricted IP feature from the Workarea **>** Settings **>** Configuration **>** Discussion Board **>** Restricted IPs. If you have more than one Forum, this allows you select to which Discussion Boards the Restricted IPs are applied.

To add an IP address to the restricted list, follow these steps.

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **New** > **Restricted IP**.
4. Enter the IP Address to be blocked.
5. Click the Save button ( ).
6. A list of restricted IP addresses appear.

Editing a Restricted IP Address

1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Restricted IPs**.
4. A list of restricted IP addresses appears.
5. Click the IP address to be edited.
6. Click the Edit button ( ).
7. Edit the IP address in the **Block IP** text box.
8. Click the Save button ( ).

Deleting a Restricted IP Address

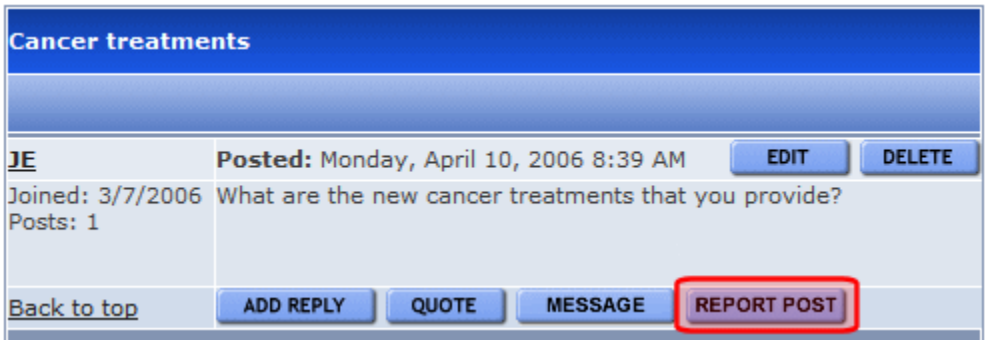
1. In the Workarea, click the **Content** tab.
2. Select a Forum from the folder structure.
3. Click **View** > **Restricted IPs**.
4. A list of Restricted IP addresses appears.
5. Click the IP address to be deleted.

6. Click the Delete button ( ).
7. A dialog asks if you are sure you want to delete the restricted IP address.
8. Click **OK** to continue.
9. A list of the remaining restricted IP addresses appear.

See Also: "Discussion Boards" on page 465

Setting Up Post Reporting

When you set up the Forum Post Reporting feature, it adds a Report button to the bottom of each post. The button lets site visitors report posts to Forum moderators. For example, users can report posts that are offensive or spam posts.



When a user clicks the Report button, an email notification is sent to moderators. A moderator can then view the post and decide whether to edit, delete or leave the post. *See Also:* "Reporting a Post" on page 532

To set up a Forum for Post Reporting, follow these steps.

IMPORTANT! Your Ektron CMS400.NET Web server must be set up to send emails. See the Setup Manual section "Configuring E-Mail Notifications for Tasks and Content Workflow."

1. In the Workarea, click the **Content** tab.
2. Select a Discussion Board from the folder structure.
3. Click **View > Permissions**.

4. Make sure Forum moderators have Moderate permission. *See Also:* "Assigning Permissions to a Discussion Board" on page 514
5. Click the Back button ( ).
6. Select a Forum.
7. Click the Properties button ( ).
8. Make sure the **Moderate Comments** box is checked. If it is not, click the Edit button ( ) and check the **Moderate Comments** box.
9. Click the Save button ( ).

Assigning Permissions to a Discussion Board

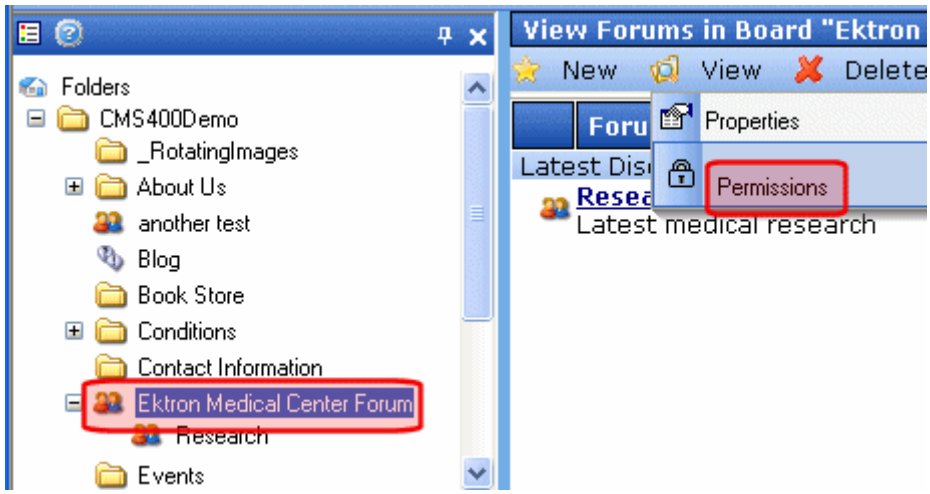
Like regular content folders, Discussion Boards have a permission table that lets you determine which users can perform which functions. (To learn more about folder permissions, see "Setting Permissions" on page 776.) Because Discussion Boards have different functions than folders, their permission table is slightly different.

In addition, each Forum has permission settings. By default, a Forum inherits permissions from its parent Discussion Board. But, you can break this inheritance and customize permissions for a Forum. If you break a Forum's inheritance, only the Forum's permission table is checked -- the parent Discussion Board's permissions are ignored.

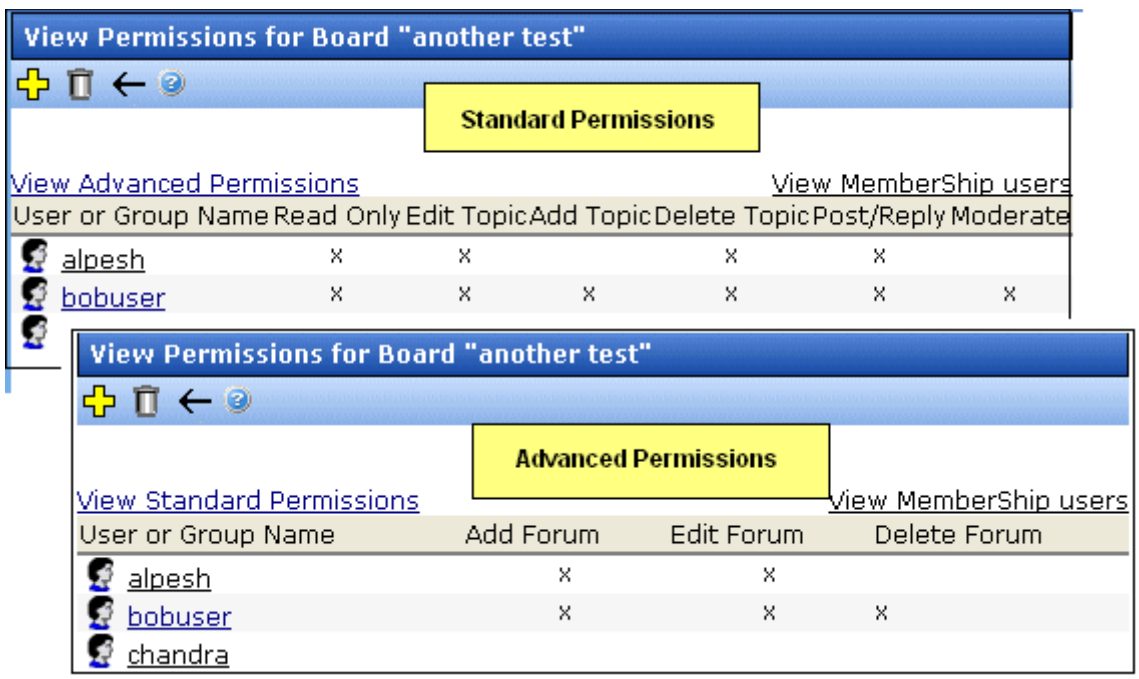
Modifying a Discussion Board's Permission Table

To access a Discussion Board's permission table, navigate to and click the board so it appears in the Workarea. Then, click **View > Permissions**.

NOTE Only Administrators group members can access the Discussion Board Permission Table.



Below is an example of a Discussion Board permission table for regular users. Membership users have fewer permissions. *See Also:* "Discussion Board Permissions" on page 517



Discussion Board permissions are more fully explained through the following topics.

- ”Initialization of Discussion Board Permission Values” on page 516
- ”Discussion Board Permissions” on page 517
- ”Discussion Forum Permissions for Membership Users” on page 518
- ”Granting Discussion Board Permissions to CMS Users and User Groups” on page 519
- ”Removing Discussion Board Permissions from CMS Users and User Groups” on page 520
- ”Editing Discussion Board Permissions for CMS Users and User Groups” on page 520
- ”Assigning User Permissions to Forums” on page 520

Initialization of Discussion Board Permission Values

When you create a Discussion Board, **Ektron CMS400.NET** seeds its permission table with values from the parent folder, as described in the following table.

Parent Folder Permission	Discussion Board Permission
Read only	Read only
Edit	Edit Topic
Add	Add Topic
Delete	Delete Topic
Add Folders	Add Forum
Edit Folders	Edit Forum
Delete Folders	Delete Forum

NOTE Because there are no corresponding permissions for the Discussion Board's **Moderate** and **Post/reply** permissions, their initial value is blank.

So for example, if the user JSmith has permission to perform all functions for a folder, and a Discussion Board is created in that folder, JSmith initially receives all permissions listed above for the Discussion Board. However, you can edit the permissions as needed.

As soon as you create a Discussion Board, it is disconnected from the parent folder's permission table. Subsequent changes to the parent's permissions have no effect on Discussion Board permissions.

Discussion Board Permissions

The following table lists all permissions that may be granted to regular users. Only some permissions can be granted to membership users (that is, site visitors who register to participate in the Forum).

Permission	Give the user ability to	Can be assigned to membership users	For more information, see
Read only	View Forums and posts; cannot submit a post	Yes	
Edit Topic	Edit a topic's title	No	"Editing a Topic's Title" on page 497
Add Topic	Add new topics	Yes	"Adding a Topic to a Forum" on page 491
Delete Topic	Delete a topic	No	"Deleting a Topic" on page 498
Post/Reply	Post a new topic or reply to an existing one, either from the Workarea or the site	Yes	"Adding a Topic to a Forum" on page 491; "Adding a Reply to a Post" on page 499

Permission	Give the user ability to	Can be assigned to membership users	For more information, see
Moderate **Important**: Everyone who has Moderate permission will receive notifications when a post is reported. *See Also:* "Reporting a Post" on page 532	Approve and delete posts and topics. Also, receive notifications when a post is reported using the report post feature; only applicable if the Forum's Properties field **Moderate Comments** is checked.	Yes	"Moderate Comments" on page 484
Add Forum	Create a new Forum	No	"Creating a Forum" on page 482
Edit Forum	Edit a Forum	No	"Editing a Forum" on page 484
Delete Forum	Delete a Forum	No	"Deleting a Forum" on page 485

Discussion Forum Permissions for Membership Users

By default, membership users are assigned the following permissions:

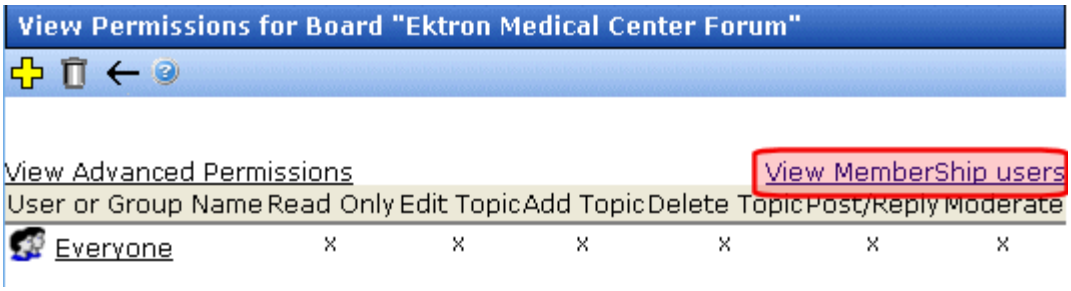
- Read only
- Add Topic
- Post Reply

They cannot be granted Edit or Delete topic nor advanced permissions (Add, Edit or Delete Forum). However, if a membership user creates a new topic, he does have the ability to delete it.

To change the default permissions, follow these steps.

1. Navigate to and click the Discussion Board so it appears in the Workarea.

2. Click **View > Permissions**.
3. Click **View Membership Users**.



4. The View Permissions for Board screen appears.
5. Add new member users and groups, remove them, or change their permissions.

Granting Discussion Board Permissions to CMS Users and User Groups

To give a CMS user or user group permissions to work with a Discussion Board, follow these steps.

1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View > Permissions**.
3. Click the Add button ( ).
4. All users and groups who are not currently assigned permissions appear. Click any user or group.
5. The Add Permission for Folder screen appears with the selected user or group.
6. Assign appropriate standard and advanced permissions then click the Save button ( ). *See Also:* "Assigning Permissions to a Discussion Board" on page 514

Removing Discussion Board Permissions from CMS Users and User Groups

To remove a user or user group from the Discussion Board permission table, follow these steps. After you remove the user, Discussion Boards do not appear within his Workarea.

1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View > Permissions**.
3. Click the Delete icon ( ).
4. Select the user or group that you want to remove from the Permission table.
5. A confirmation message. Click **OK**.
6. The user is removed.

Editing Discussion Board Permissions for CMS Users and User Groups

To edit a user or user group's Discussion Board permissions, follow these steps.

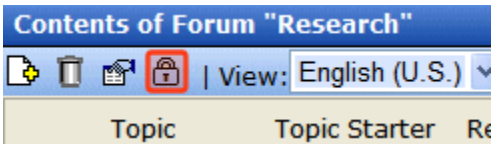
1. Navigate to and click the Discussion Board so it appears in the Workarea.
2. Click **View > Permissions**.
3. Click the user or group whose permissions you want to edit.
4. The Edit Permissions screen appears.
5. Change the settings as appropriate. *See Also:* "Discussion Board Permissions" on page 517
6. Click the Save button ( ).

Assigning User Permissions to Forums

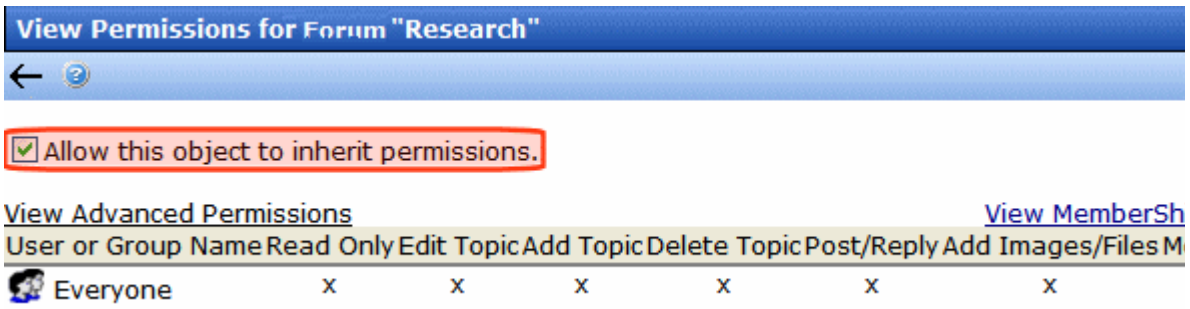
You can use all of the permission features available to Discussion Boards with any Forum. To access a Forum's Permission Table, follow these steps.

1. Open **CMS Workarea > Content**.
2. Click the Forum.

3. Click the View Permissions button on the Contents of Forum screen (circled below).



4. A Permission Table appears. *See Also:* "Discussion Board Permissions" on page 517



Setting a Forum's Permission Table Values

A Forum initially inherits (that is, copies all permissions from) its parent Discussion Board's permission settings.

When you first view a Forum's permission table, you see these settings plus a check box that allows you to maintain the inheritance or break it (circled above).

If you *break* inheritance by unchecking the **Allow this object to inherit permissions** box, the Forum permission screens change from view-only to edit. At this point, you can modify the Forum's permissions as needed.

To later *restore* inheritance, check the box. When you do, the parent Discussion Board's permissions overwrite any Forum-specific changes. The Forum then reverts to a read-only state. Any permission changes must be made at the Discussion Board level while inheritance is enabled.

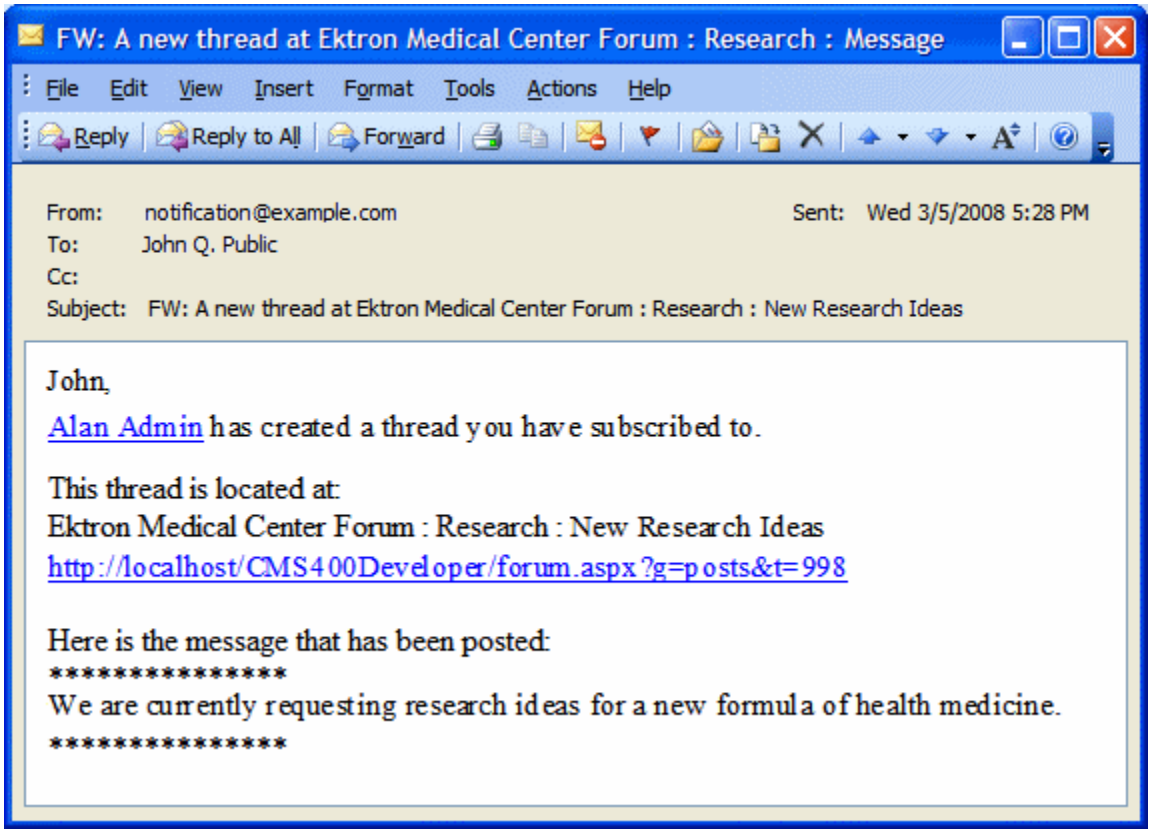
Sending Notifications When a New Forum Topic or Post is Created

The Discussion Board's Email Notification feature enables Ektron CMS400.NET to generate email for a list of registered users whenever a new forum topic or post is created.

For example, anyone may register to be notified whenever a new forum topic or post is created. As soon as the new forum topic or post is created on the discussion board, registered users receive an email announcement with a link to the new topic or post. The recipient clicks the link and immediately accesses the page.

As a result, a self-selected group of users can be instantly notified when user's post information to your discussion board relating to their interests. Once the messages are set up, you don't need to do anything -- everything happens in the background.

Sample Discussion Board Email Notification


FW: A new thread at Ektron Medical Center Forum : Research : Message
File Edit View Insert Format Tools Actions Help
Reply Reply to All Forward
From: notification@example.com
Sent: Wed 3/5/2008 5:28 PM
To: John Q. Public
Cc:
Subject: FW: A new thread at Ektron Medical Center Forum : Research : New Research Ideas
John,
Alan Admin has created a thread you have subscribed to.
This thread is located at:
Ektron Medical Center Forum : Research : New Research Ideas
http://localhost/CMS400Developer/forum.aspx?g=posts&t=998
Here is the message that has been posted:
****
We are currently requesting research ideas for a new formula of health medicine.
****

See Also: "Creating the Email Message" on page 523

Creating the Email Message

You can create an email message to be sent when a new post is added to the discussion board or when a new topic is added. A simple editor lets you apply some XHTML formatting the message.

Including Variables in the Default Message

The messages can include variables that retrieve information about the new post or topic and display it in the message text. The variables are surrounded by at signs (@). For example:

```
@appPosterDisplayName@ has created a thread you have subscribed to.
```

In the email, this text might read:

```
Alan Administrator has created a thread you have subscribed to.
```

You can use the following variables in the body of an email notifications.

Variable	Displays this information in the email
@appTopicTitle@	The title of the topic.
@appTopicId@	The integer ID of the topic.
@appRecipientDisplayName@	The display name of the person receiving the email.
@appRecipientId@	The recipient's integer ID.
@appRecipientFirstName@	The first name of the person receiving the email.
@appRecipientLastName@	The last name of the person receiving the email.
@appRecipientEmail@	The email address of the person receiving the email.
@appHostUrl@	The host site's URL.
@appForumUrl@	The forum's URL.
@appPostMessage@	The text of the message that was posted to the discussion board.
@appPosterId@	The integer ID of the person who created the post.
@appPosterDisplayName@	The display name of the person who created the post.
@appPosterProfileUrl@	The profile URL for the person who created the post.
@appPostUrl@	The URL of the post on the Web site.

To create a message, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Discussion Boards > Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the message.

4. At the **Type** field, select either **NewForumTopic or ForumPost**.
5. Select whether to make the email message a Default message.
6. In the editor, enter the message text. Use the variables listed in the table above to retrieve information about the about the new post or topic and display it in the message.
7. Click the Save button ( ).

Inserting Discussion Board Server Controls

Ektron CMS400.NET provides two server controls for use with the Discussion Boards. The Forum server control displays the discussion board. The Active Topics server control displays a list of active or recent topics.

Inserting the Forum Server Control

After creating at least one hierarchy of Discussion Board elements, place a Forum server control on a Web page. That procedure is described in the **Ektron CMS400.NET** Developer's Manual section "Introduction to Ektron CMS400.NET Server Controls" > "Discussion Board Server Controls" > "Forum Server Control."

If you want require authentication by site visitors, the web page that hosts the Forum should also contain

- a Membership server control (or a link to page that has one). This lets site visitors/membership users register for Discussion Boards.
- a Login server control that lets the site visitor/membership user log in

NOTE Ektron recommends adding text below the Login server control to remind the site visitor to enter his email address at the **User** field. For example, "At the **User** field, enter your email address."

Inserting the ActiveTopics Server Control

Displays the most active or recent topics. You can place this server control anywhere on your site. For example, on your home page, display the last ten topics added to the board.

To learn about the ActiveTopics Server Control, see the **Ektron CMS400.NET** Developer's Manual section "Introduction to Ektron CMS400.NET Server Controls" > "Discussion Board Server Controls" > "ActiveTopics Server Control."

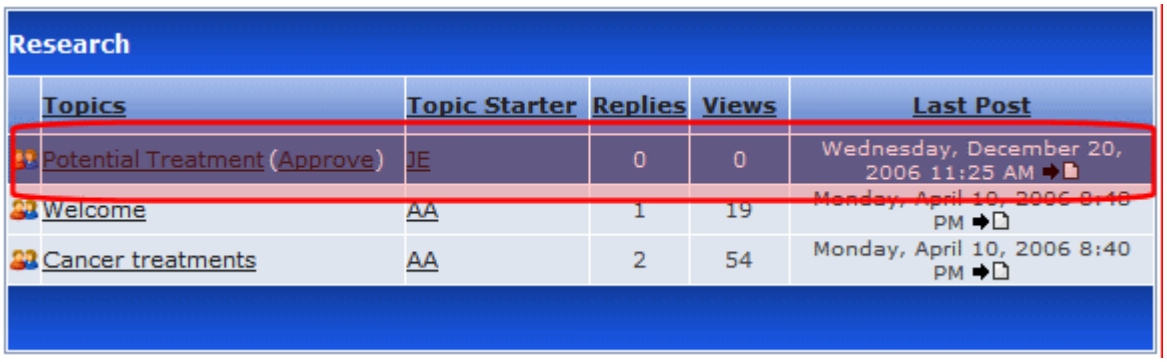
Using Discussion Boards on Your Web Site

This section explains what can be done when using a Discussion Board on your site.

- "Approving a Topic" on page 526
- "Sorting Topics" on page 527
- "Deleting a Topic" on page 498
- "Posting a Reply" on page 528
- "Editing a Post" on page 530
- "Quoting a Post" on page 529
- "Approving a Post" on page 531
- "Deleting a Post" on page 532
- "Reporting a Post" on page 532
- "Adding Video to a Post" on page 533
- "Moving a Topic and Its Posts to Another Forum" on page 505
- "Suppressing User Information from the Forum Profile Display" on page 534
- "Outputting a Forum as an RSS Feed" on page 537
- "Subscribing to a Discussion Board" on page 538
- "Sending a Private Message" on page 539
- "Using the Control Panel" on page 540

Approving a Topic

A Topic needs to be approved when a user who does not have moderate permission for the Forum adds a Topic. When you view topics on the site, any that need approval are highlighted with a different color background.



From this screen, you can click the **Approve** link next to the topic's title. You could also click the Topic's title to view it and click the **Approve** button (APPROVE) on that screen.

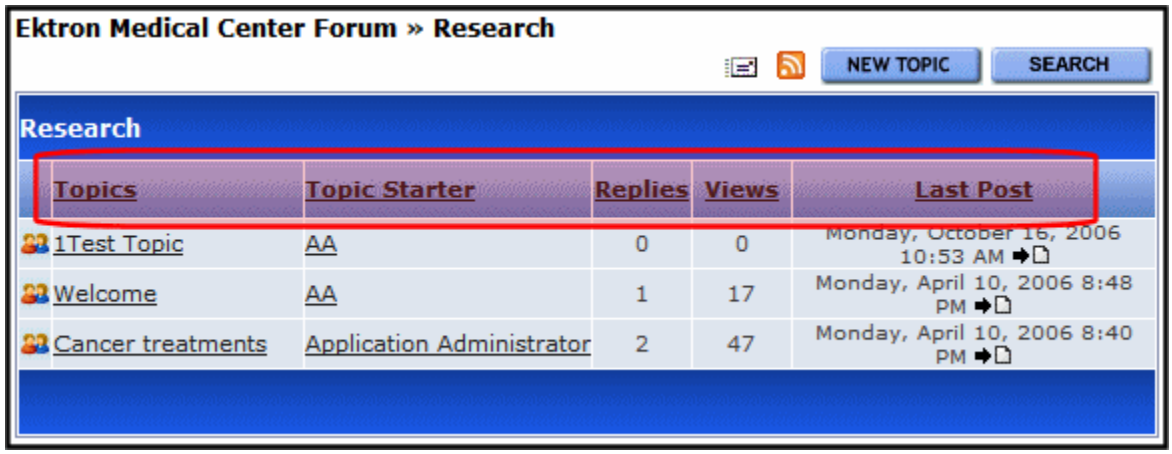
Sorting Topics

Topics can be sorted by the columns of a Forum. To sort a Forum:

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click any of the column titles to sort by alpha or numerical order.

On the first click, items are sorted first by any numeric (1-10) values, then by alpha values (A to Z). Clicking a column title a second time sorts the items in reverse.

When the page is first viewed, the list is sorted by Last Post.



Deleting a Topic

Topics on the site can be deleted from a Forum by the users who created them or by users with the Moderate permission. This includes Membership users. *See Also:* "Moderate" on page 518 and "Discussion Board Permissions" on page 517.

WARNING! When you delete a topic, any replies or posts associated with the topic are also deleted.

To delete a topic:

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click the topic you wish to delete.
4. Click **Delete Topic**.
5. A dialog appears asking you to confirm the deletion.
6. Click **OK**.

The topic and all associated posts and replies are deleted.

Posting a Reply

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click **Add Reply**.

NOTE If a topic is moderated, a message appears stating that your reply is pending moderator approval.

There are two editors that site visitors can use when replying:

- eWebEditPro (scaled-down version)
- eWebEdit400

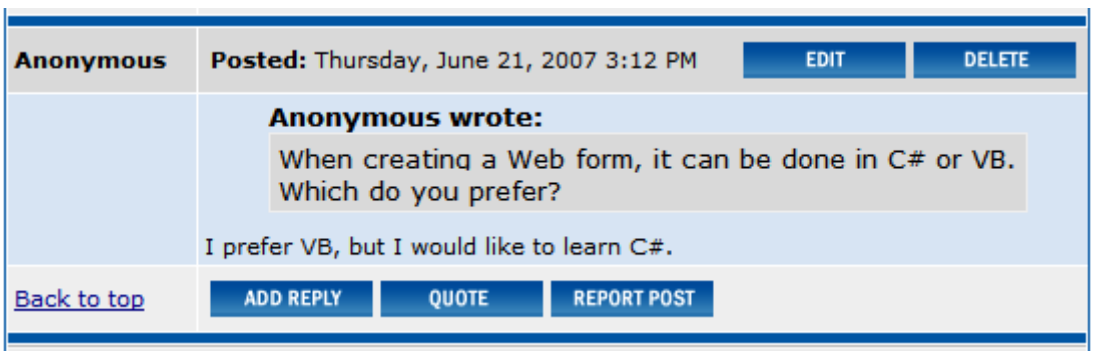
For users who sign in before posting, this decision is made for the user at the **Forum Editor** field on the Edit User screen.

If users does not sign in, eWebEdit400 is the editor.

If a site visitor is using an Apple Macintosh computer, eWebEdit400 is the editor regardless of the **Forum Editor** field value on the Edit User screen.

Quoting a Post

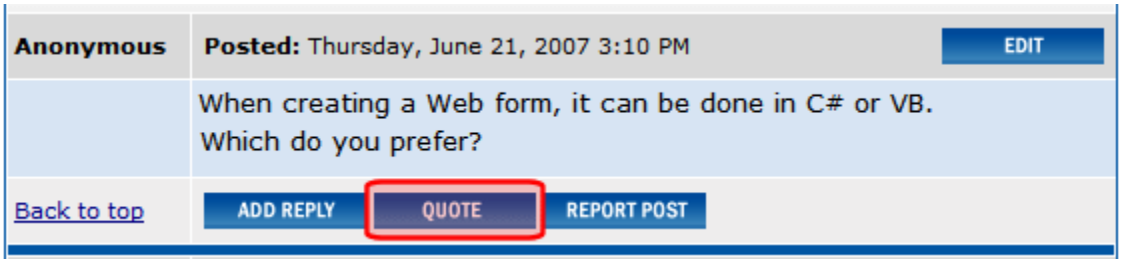
Quoting a post's comments means that your reply begins with the original post's comments. You can then add your comments and even edit the quoted post, so that you can include only the portion on which you are commenting.


Anonymous
Posted: Thursday, June 21, 2007 3:12 PM
EDIT
DELETE
Anonymous wrote:
When creating a Web form, it can be done in C# or VB. Which do you prefer?
I prefer VB, but I would like to learn C#.
Back to top
ADD REPLY
QUOTE
REPORT POST

To quote a post, follow these steps.

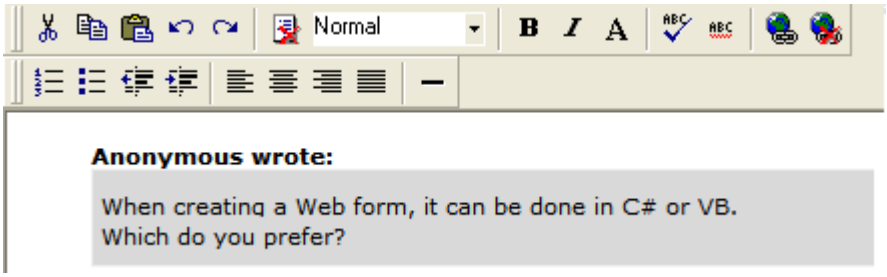
1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Click a Topic.

4. Find the post you want to quote.
5. Click the Quote button.



6. The editor appears with the quoted information at the top of the text area.

.



7. Add your comments below the quote.
8. Click Post.

Editing a Post

1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Find the topic you want to edit.
4. Click **Edit**.

Approving a Post

When defining a Forum, you can check the **Moderate Comments** field. If you do, posts to the Forum must be approved before they appear on the Web site. Only users who are assigned the **Moderate** permission are allowed to approve a post. *See Also:* "Discussion Board Permissions" on page 517

You can approve a post from the Workarea or the Forum on the site. See also "Approving a Post in the Workarea" on page 500.

To approve a post from the Forum, follow these steps.

1. Log into the site.
2. Navigate to the Forum.
3. Click the Moderate button (MODERATE).
4. The Forum's Control Panel appears.

5. Click the topic.
6. The topic appears. Posts requiring approval have an Approve button (APPROVE).

7. Click the Approve button (APPROVE).
8. A screen appears stating that the post has been approved.
9. The post now appears on your Web site.

Deleting a Post

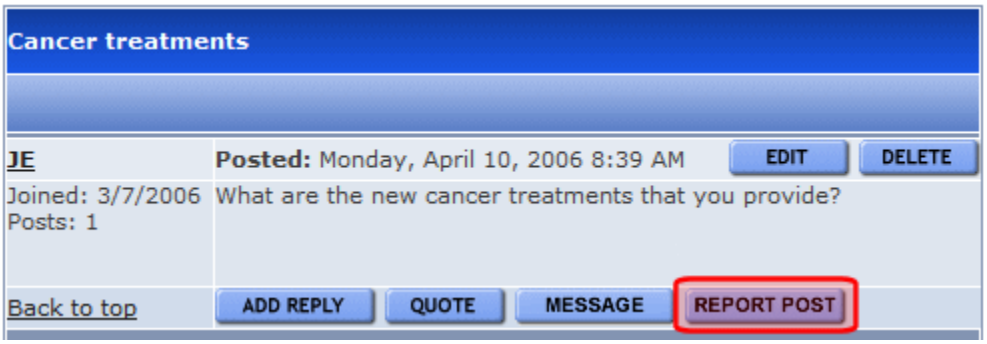
1. Go to the Web page that hosts the Discussion Board.
2. Click the Forum of interest.
3. Find the topic you want to delete.
4. Click **Delete**.

Reporting a Post

You can allow site visitors to inappropriate report posts, such as spam or offensive posts.

When a site visitor clicks the **Report Post** button (located at the bottom of the post), an email notification is sent to all Forum moderators. Any moderator can review the post and decide to edit, delete, or leave it alone. *See Also:* ”Setting Up Post Reporting” on page 513

.

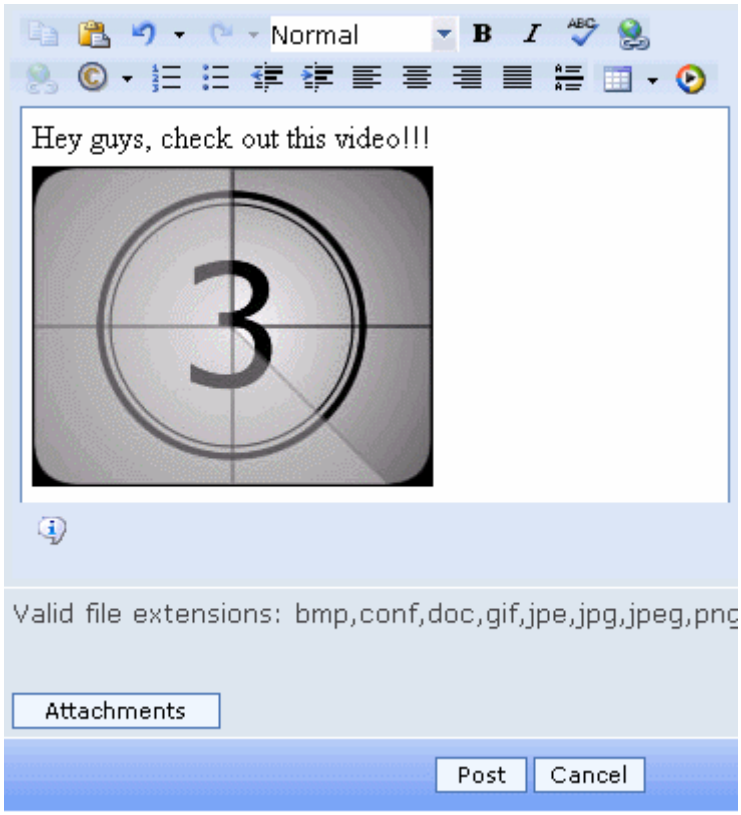


Adding Video to a Post

A user can add video to a post by clicking the Add Video button ( ) in a Forum post using eWebEdit400. The following prerequisites must be in place for a user to perform this action:

- the **embed** tag must be added to the Accepted HTML property in the Workarea Forum's properties. *See Also:* "Accepted HTML" on page 473.
- a user must be using eWebEdit400 *See Also:* "Introduction to Ektron CMS400.NET Editors" on page 490
- the video must be in the **.wmv** format
- the video must reside in a hosted location. For example, http://www.example.com/myvideos/fridaylunch.wmv

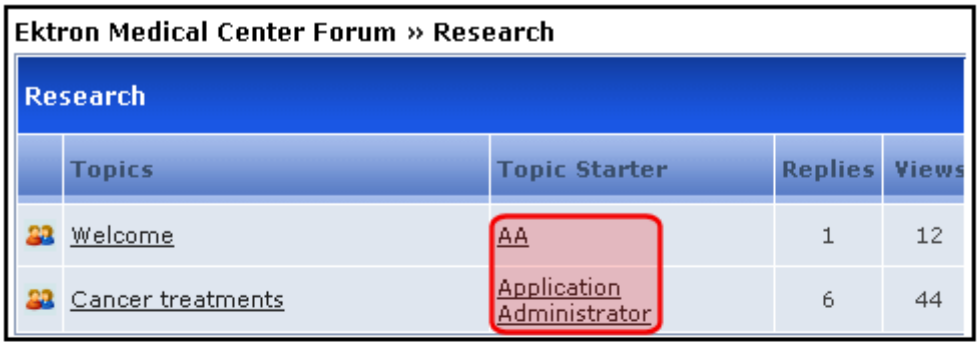
Once you click the Add Video button ( ), enter the path to the video in the dialog box and click **OK**. A place holder is then added to the post.

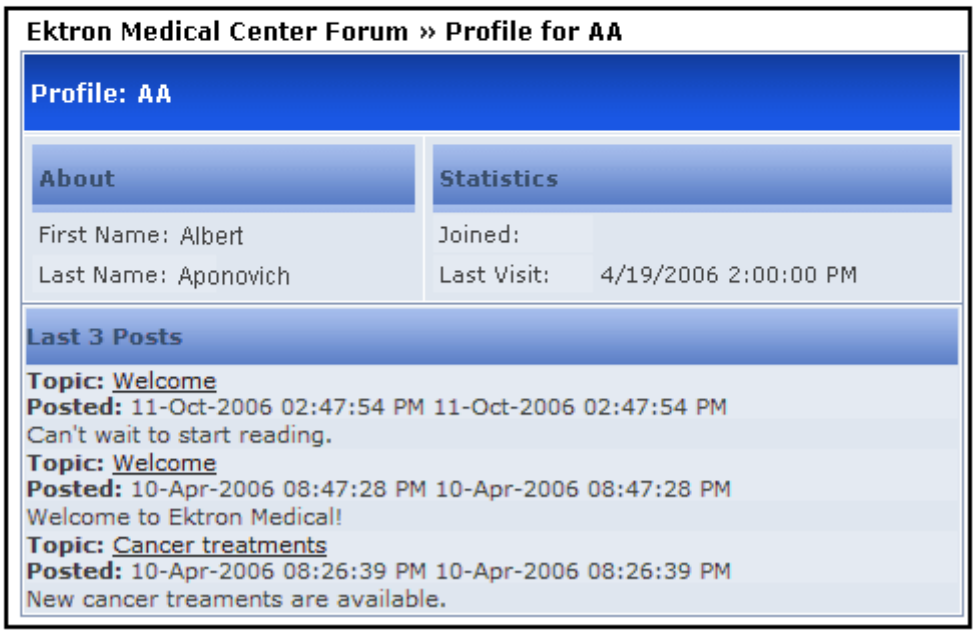


Suppressing User Information from the Forum Profile Display

Anyone browsing to a Discussion Forum can view information about its contributors by clicking the user name, as shown below.

.





However, if the Forum server control's `HideUserProfile` property is `true`, non-administrator users cannot see the profile, even if the **Private Profile** setting is set to Public. For more information, see "How Users Suppress Profile Information" on page 536 and "How Administrators Suppress Profile Information" on page 537.

Administrators can see the profile, regardless of how the `HideUserProfile` property is set.

What Information is Contained in the Profile?

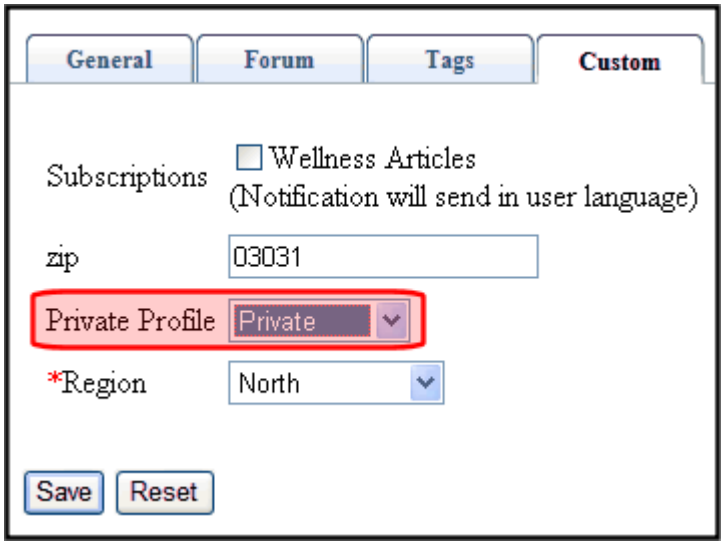
The profile contains the following information about a user:

- **First Name** - the first name of the user
- **Last Name** - the last name of the user
- **Email** - the email address of the user
- **Joined** - the date the user joined
- **Last Visit** - the date the user last visited the site
- **Number of Posts** - the amount of posts a user has contributed
- **Post History** - a list of posts the user has contributed

How Users Suppress Profile Information

Users can determine if their profile is viewable via the **Private Profile** drop down box on the Membership Registration screen (shown below) and the Edit Profile screen. If **Private Profile** is set to Private, profile information is suppressed. If it is set to Colleagues, only a user's colleagues can see his profile. When set to public, everyone can see a user's profile information.

NOTE If the Forum server control's `HideUserProfile` property is set to `true`, non-administrator Forum visitors cannot see a user profile, even if the **Private Profile** drop down box is set to Public.



NOTE The Membership Registration screen appears wherever your developer inserts the Membership Server Control. For more information, see the **Ektron CMS400.NET** Developers Manual section "Membership Server Control."

How Administrators Suppress Profile Information

If you want to suppress the display of user names as an administrator, follow these steps.

NOTE If the Forum server control's `HideUserProfile` property is set to `true`, non-administrator Forum visitors cannot see the profile, even if the **Private Profile** check box is unchecked.

1. If the user is a *regular user*, go to **Settings > Users** and select the user whose information you want to suppress.

   If the user is a *membership user*, go to **Modules > Community Management > Memberships > Users** and select the user whose information you want to suppress.
2. In the User Properties area of the screen, check the **Private Profile** checkbox.

Outputting a Forum as an RSS Feed

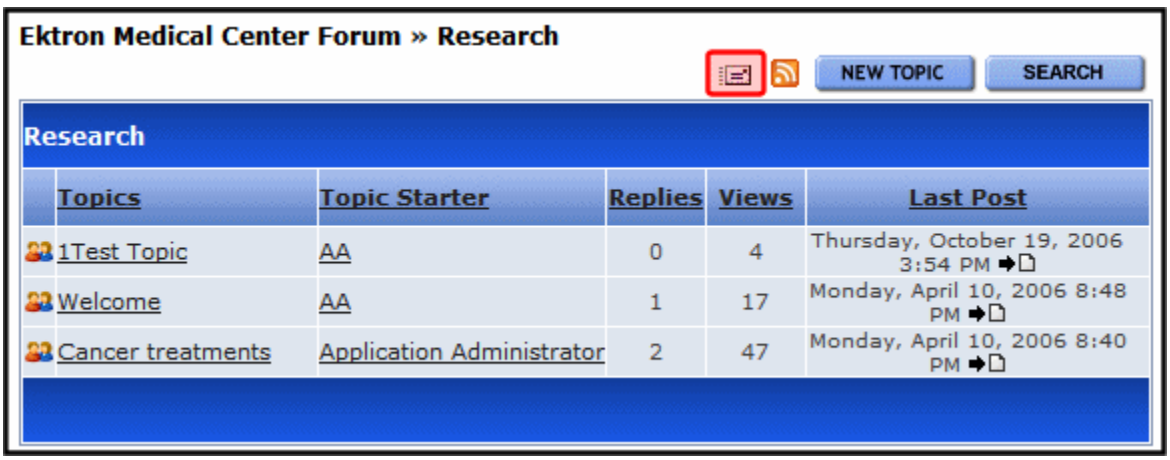
You can output a Forum as an RSS feed by clicking the RSS feed button ( ). Each level of the Forum has an RSS feed button. This allows you to output a specific topic as an RSS feed.

This following is an example of the output.

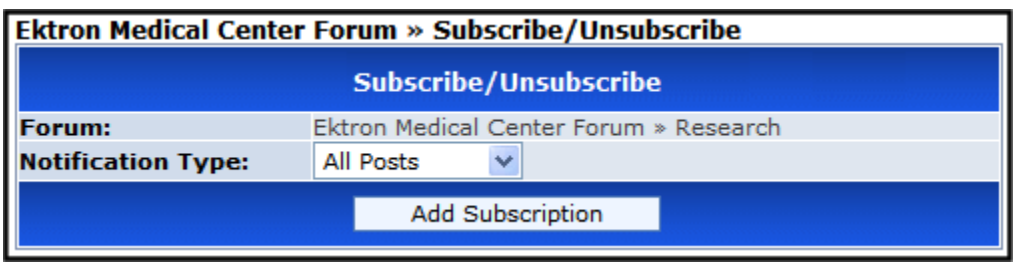
```
<?xml version="1.0" encoding="UTF-8" ?>
- <rss version="2.0">
    <!--  Generated by Ektron CMS400.NET -->
    - <channel>
        <title>Ektron Medical Center Forum</title>
        <link>http://test/webform.aspx</link>
        <description>Ektron Medical</description>
      - <item>
          <title>Research</title>
          <link>http://test/webform.aspx?g=topics&f=108</link>
        - <description>
            <![CDATA[ Latest medical research ]]>
          </description>
          <pubDate>Wed, 11 Oct 2006 17:50:04 GMT</pubDate>
        </item>
      </channel>
  </rss>
```

Subscribing to a Discussion Board

After logging in, discussion board users can subscribe to Forum posts and replies by clicking the Subscribe button ( ) (highlighted below).



The button appears at each Discussion Board level, so that a user can subscribe to Forums and topics of interest. After clicking the button, the following screen appears.



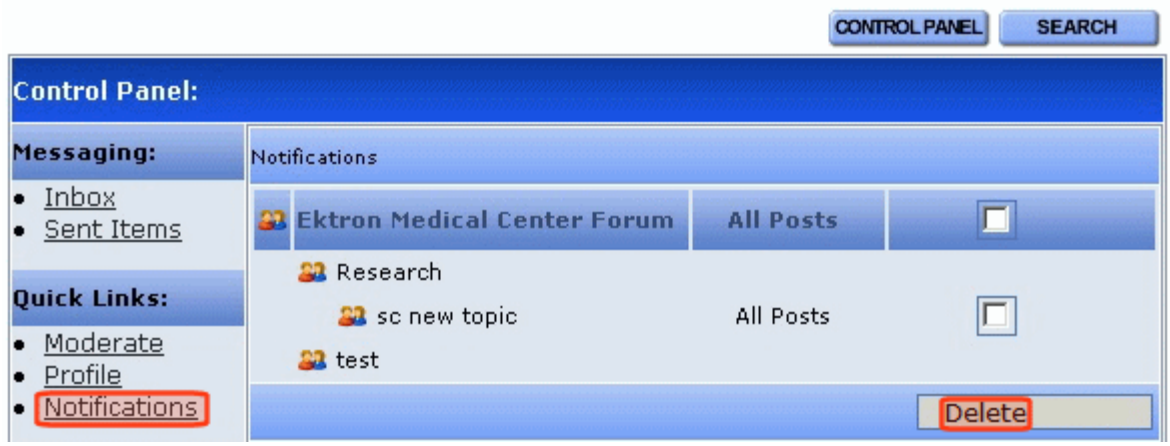
The user selects a notification type, listed below.

- **All Posts** - notifies you when any post or reply is added
- **Replies to Me** - notifies you when someone replies to your post

Next, he clicks the **Add Subscription** button. A page notifies him that his subscription was added.

Reviewing Subscriptions

To review your Forum subscriptions, go to the Control Panel and click **Notifications** in the lower left corner. A screen indicates each Discussion Board level to which you have subscribed, as illustrated below.



Deleting a Subscription

To delete any subscription, check the corresponding check box and click the **Delete** button (highlighted above).

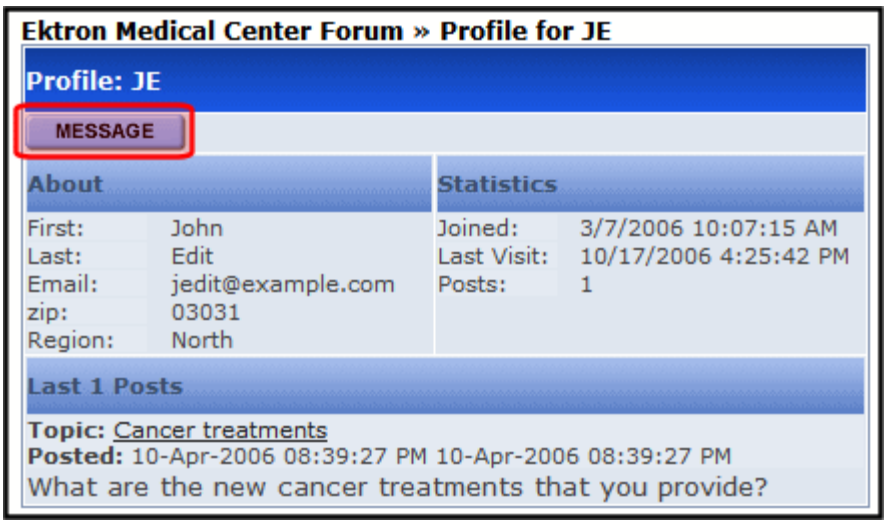
Sending a Private Message

Logged in users can send a private message to the person who created a post or reply. Only the sender and receiver can view private messages. This requires both users to be either a CMS400.NET user or a Membership user.

To send a private message, follow these steps.

1. Navigate to a post.
2. Click the User's name.

3. When the User Profile appears, click the Message button.



4. The Message screen appears.

NOTE The **To:** field is filled automatically. Users cannot add additional members.

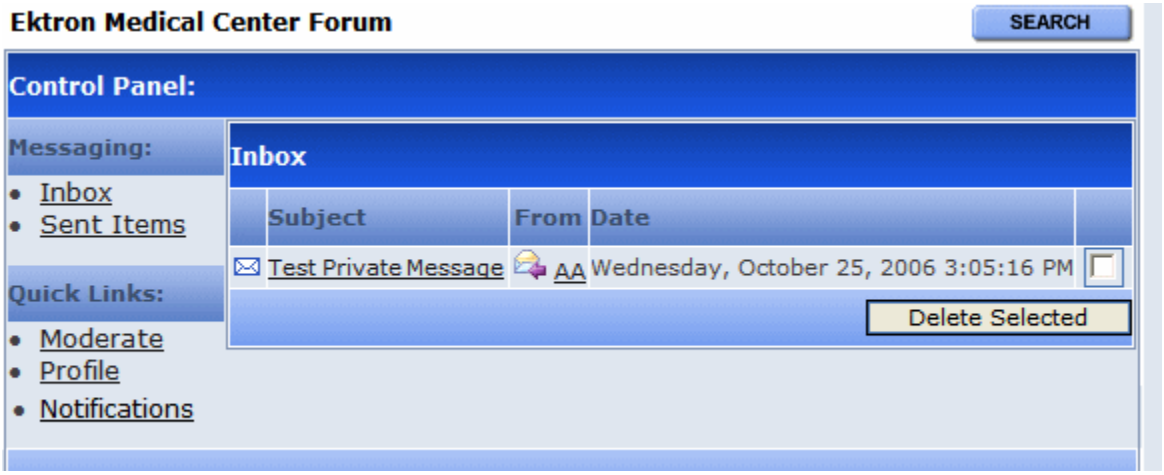
5. Enter a Subject.
6. Enter a Message.
7. Click the Post button.
8. Users are notified that a message was sent.

Using the Control Panel

The Control Panel allows logged in users to view your profile, read, reply to and delete private messages. It also allows users with moderate permissions to moderate the Forum. The Control Panel button is located at the Forum level.

.

Clicking the Control Panel button opens control panel.



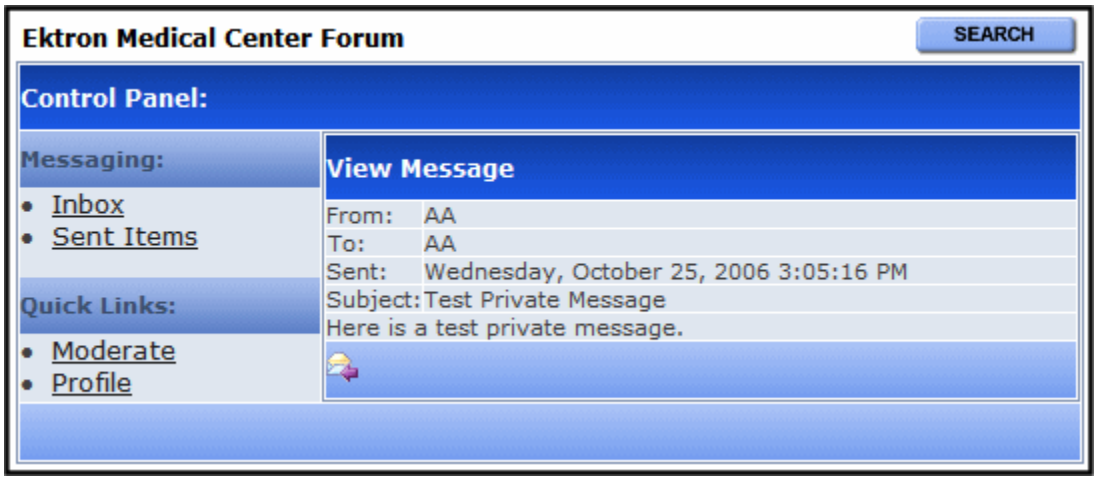
The Inbox view appears by default. From this view, users can read a message by clicking on it. Once a message is read, its icon changes from unread ( ) to read ( ).

In addition, users can view information about the person who sent the message by clicking their name. Users can also delete the message by clicking the corresponding check box then the delete button. To switch to a different view, click its link.

The user can also check his subscriptions. See ”Reviewing Subscriptions” on page 539.

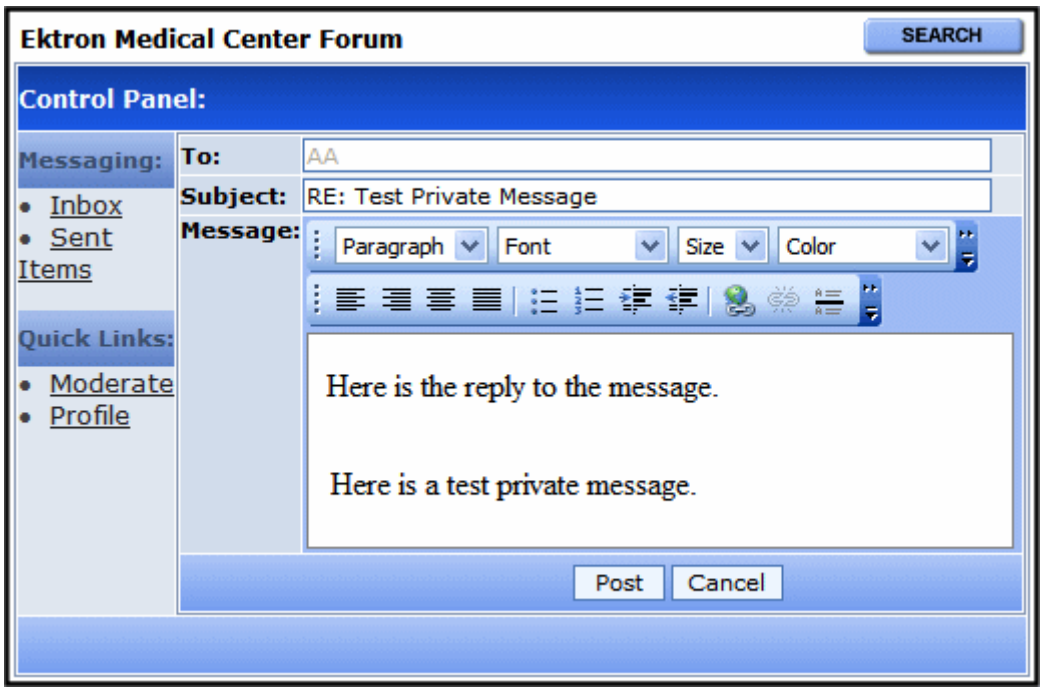
Viewing and Replying to Messages

From the Inbox or Sent Items in the Control Panel, users can view a message by clicking on it. On the View Message screen, users can see who sent the message, to whom the message was directed, when it was sent, the subject and the contents of the message.



Users can reply to a message by clicking the reply button ( ). Once clicked, the editor opens in the control panel, and a user can reply.

IMPORTANT! When replying to a private message, users add their response to the existing message. Only one message is created.



Once a user adds a reply to the private message, he clicks the **Post** button. He is then informed that the message was sent.

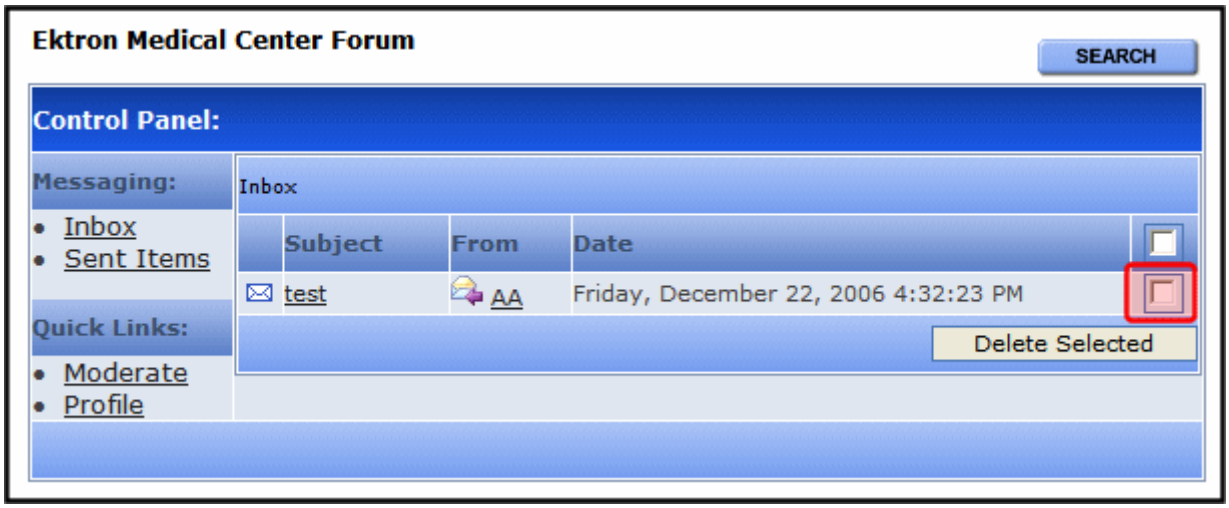
Deleting a Private Message

To delete a private message, follow these steps.

1. Click the Control Panel button on the front page of the Discussion Board.

.

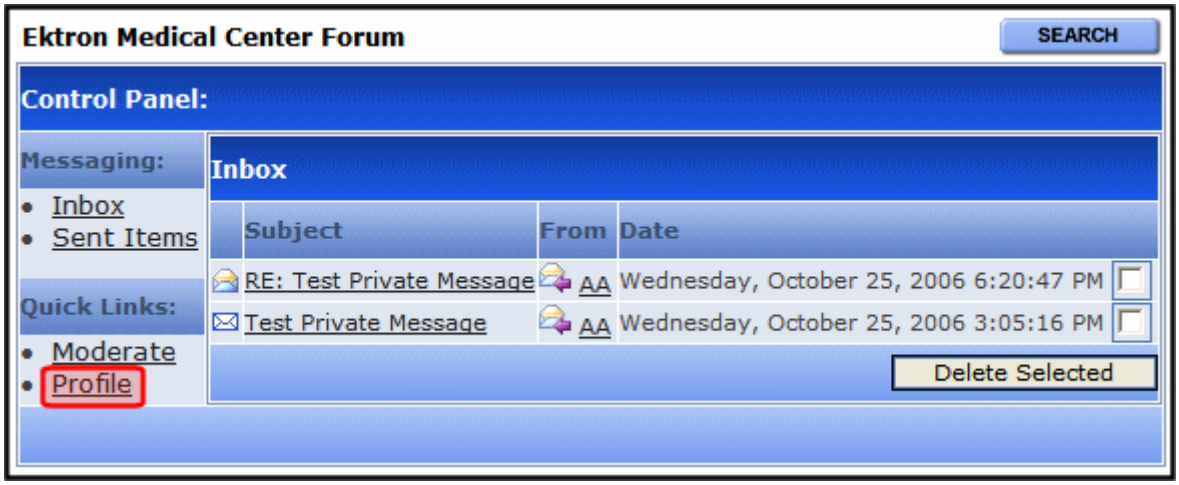
2. Click the check box next to the message.



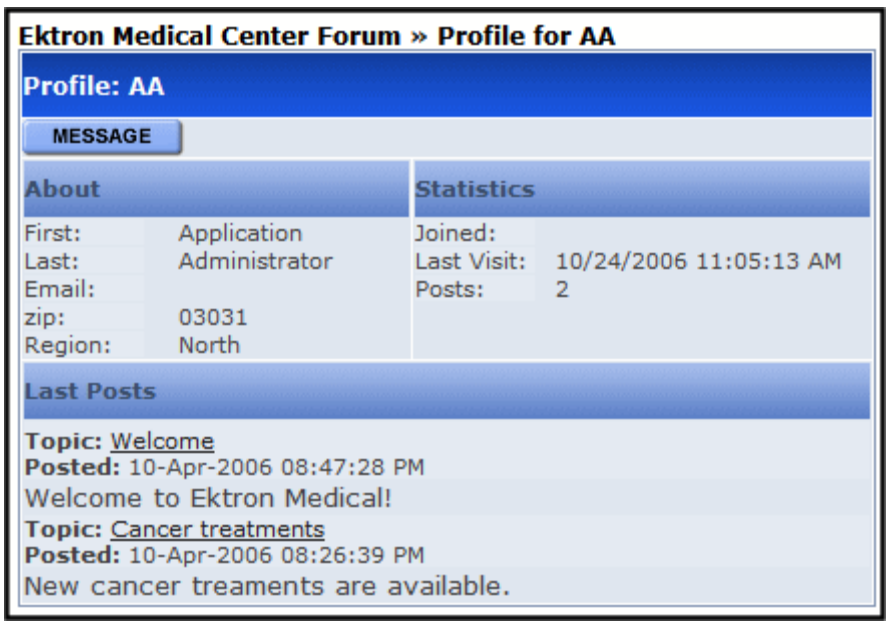
3. Click the **Delete Selected** button.
4. A confirmation box asks if you want to delete all selected messages. Click **OK**.
5. The message is deleted.

Viewing a User Profile From the Control Panel

To view a profile from the Control Panel, click the Profile link in the Control Panel. "What Information is Contained in the Profile?" on page 535

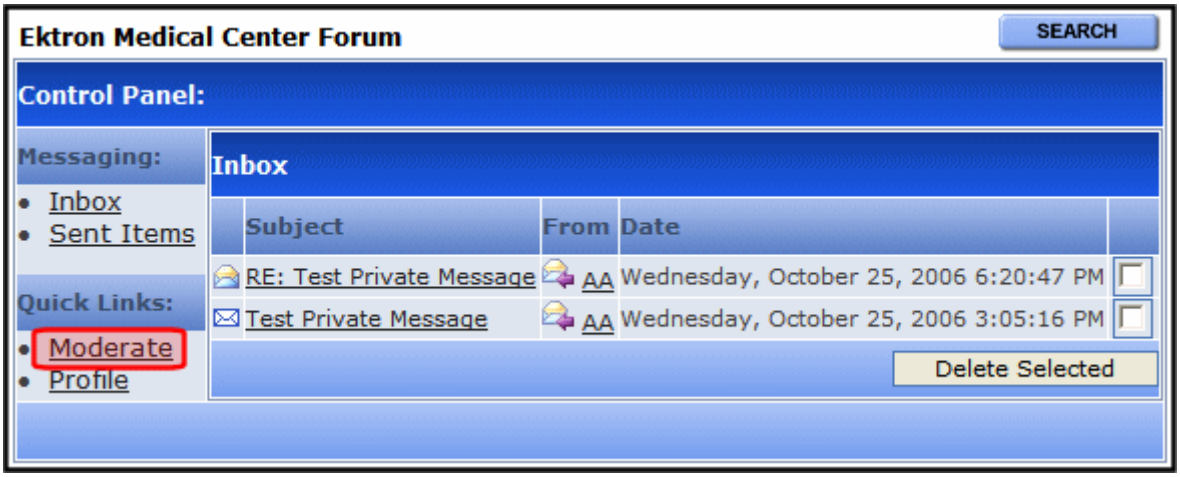


Once the Profile link is clicked, the user's profile page appears.

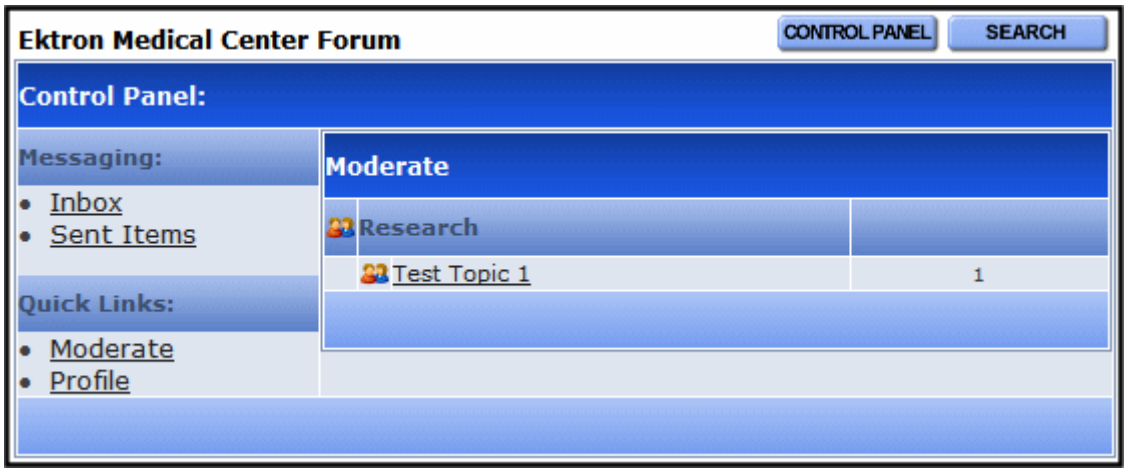


Moderating From the Control Panel

Users who have permission to moderate a Forum can do so from from the Control Panel by clicking the **Moderate** link.



Once **Moderate** is clicked, the user sees a list of items that need approval.



Clicking an item opens the post. From this screen, you can edit, approve, or delete the post. *See Also:* ”Approving a Post” on page 531.

Calendars

The Calendars feature allows you to create event calendars for your Web site. Once created, users may add calendar events that are posted to the calendar for visitors to see.

NOTE The User Manual section “Working with Calendars“ explains calendar concepts and procedures that end users need to know. This section does not repeat that information. So, you should be familiar with that information before reading this.
Also, the Ektron CMS400.NET Developer’s Manual provides instructions on using the Calendar server control/custom function.

This chapter explains **Ektron CMS400.NET** calendars through the following topics.

- ”Calendar Toolbar Buttons” on page 548
- ”Accessing the Workarea Using Calendars” on page 550
- ”Calendar Permissions” on page 550
- ”Adding a New Calendar” on page 551
- ”Editing a Calendar” on page 556
- ”Deleting a Calendar” on page 557
- ”Calendar Event Types” on page 557
- ”Displaying Calendars on Web Pages” on page 560
- ”Creating a Foreign Language Calendar” on page 560

Calendar Toolbar Buttons

Within the Calendars feature, several buttons (described below) help you perform actions.

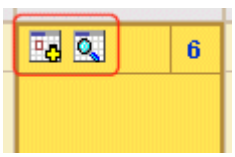
Button	Name	Lets you	More Information
	Add Calendar	Access Add Calendar screen	”Adding a New Calendar” on page 551

Button	Name	Lets you	More Information
	Save	Save calendar or calendar event	
	Show Calendar	Display calendar in Workarea	“Viewing a Calendar” in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars
	Manage Event Types	Add, edit, and delete Event Types to and from a calendar	”Calendar Event Types” on page 557
	Add Calendar Event	Access Add Calendar Event screen in the Workarea	“Adding a Calendar Event” in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars”
	Edit	Edit calendar or event name	”Editing a Calendar” on page 556; ”Editing the Event Type Name” on page 559
	Delete	Delete calendar or calendar event	”Deleting a Calendar” on page 557
	Delete all recurring events	Delete all events in a recurring series	“Deleting All Events in a Recurring Series” in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars”
	Add Calendar Event	Access the Add Calendar Event screen from calendar on Web page	“Adding a Calendar Event” in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars”

Button	Name	Lets you	More Information
	View Date	View calendar events for selected day	“Viewing a Calendar Event” in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars”
	Add Library	Select a library Quicklink for an event.	Hyperlink field description in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars”

Accessing the Workarea Using Calendars

To access the Workarea after viewing a calendar, you cannot right click the mouse then choose Workarea from the context-sensitive menu as you can with content. Instead, after logging in, click either the Add Events or View Events icon (circled below) to access the Workarea.



Calendar Permissions

Calendar permissions are derived from the content folder assigned to the calendar. This section explains the permissions you can set for a calendar.

Administrator Permissions

Members of the following groups have full control over all calendar features (as they do for content). Only these users can add, edit, or delete a calendar.

- administrator user group

- users and user groups defined on the Manage Members for Role: Calendar-Admin screen. (For more information, see "Defining Roles" on page 795.)

Administrators may also add, edit, and delete calendar events.

User Permissions

Users who are not in one of the groups listed in "Administrator Permissions" on page 550 *cannot* add, edit, or delete calendars.

Non-administrator users can add, edit, or delete calendar events *if* they have add, edit, and delete permissions for the calendar's content folder. *See Also:* "Setting Permissions for a Content Folder" on page 780

Membership User Permissions

Membership users cannot add, edit, or delete calendar events.

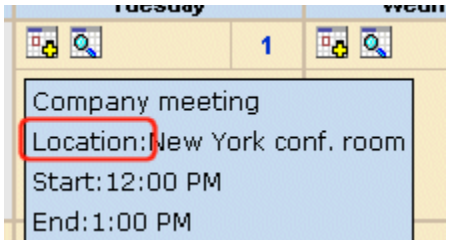
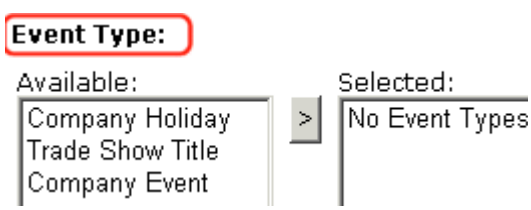
Adding a New Calendar

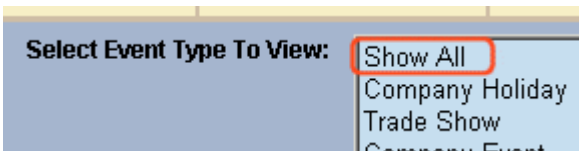
To add a new calendar, follow these steps.

See Also: "Calendar Permissions" on page 550

1. From the **Ektron CMS400.NET** Workarea, click **Modules > Calendar**.
2. Click the Add Calendar button ( ).
3. The Add or Edit Calendars screen appears. The following table explains each field on the screen.

Section	Description
Title	Enter a calendar title, which identifies the calendar in the Workarea.

Section	Description
Description	Enter a calendar description, which appears on the Calendar Modules screen to help identify the calendar.
Location Label	Specify the label text for the location field. The location appears with the detail of a calendar event. 
Start Time Label	Specify a label for the start time. A calendar event can display the start time.
End Time Label	Specify a label for the end time. A calendar event can display the end time.
Display Weekends	Place a check in this box if you want the calendar to display Saturdays and Sundays along with weekdays. To display weekdays only, remove the check. *See Also:* "Display Weekends" on page 555
Forward Only	To have the calendar display only events from the date when someone views the calendar forward (but no past events), place a check in the box next to **Show only events that fall after the viewing day** However, a logged-in user can view past calendar events.
Event Type Label	One section of the Add Calendar Events screen displays available event types and lets the user assign them to the event.  By default, this text is **Event Type:**. To change the default text, edit this field.

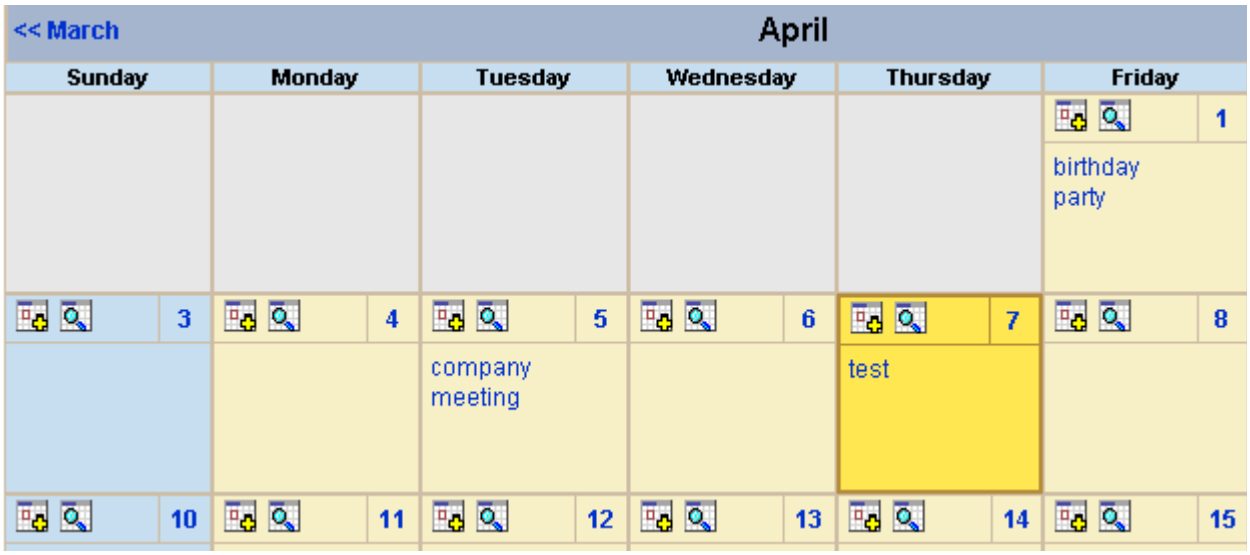
Section	Description
Event Types Available	If you want to allow users to assign event types to events on this calendar, check this box.
Event Types Required	If you want to require users to assign event types when adding events, check this box. This checkbox can only be checked if **Event Types Available** is checked.
Instructions	If you allow users to filter a calendar view by event type, text appears at the bottom of the screen that explains how to use the selection box. By default, this text is **Select Event Type To View**. If you want to change this text, edit this field.
Show All label	If you allow users to filter a calendar view by event type, the list of event types appears at the bottom of the screen. On top of the list is text indicating that all event types will appear on the calendar. By default, this text is **Show All**.  If you want to change this text, edit this field.

Section	Description
Long Description	This field can allow the user to enter additional information about a calendar event. Your choices are: • **No Long Description** - no additional description is allowed • **Text Only** - while adding an event, a user can enter text into a **Long Description** box. No formatting is allowed within this text. This text appears in the Event View screen and in the XML Packet. Because the text is not formatted, the XSL creator is responsible for its display. • **Rich Text Description** - works the same as the Text Only option (see above) except the user can format text using Ektron's eWebEditPro editor.
Content Folder	Specify the calendar's content folder. To understand how folder assignment affects calendar use, see "Calendar Permissions" on page 550. By default, the root (0) folder is selected. To assign a different folder, click **change**. If you do, a new screen appears. Navigate to and select the folder of your choice.

4. Click the Save button ( ).

Display Weekends

To display seven day weeks (for example, Sunday to Saturday), as opposed to five day weeks (Monday to Friday), check this box.



Do Not Display Weekends

Editing a Calendar

All calendar information, with the exception of the ID, can be edited at any time. To edit a calendar, follow these steps.

1. From the **Ektron CMS400.NET** Workarea, click **Modules > Calendar**.
2. Click the calendar you want to edit.
3. Click the Edit button ( ).
4. The Add or Edit Calendar screen is displayed.
5. Make the necessary changes to the calendar, using the table in ”Adding a New Calendar” on page 551 as a reference.
6. Click the Save button ( ).

Deleting a Calendar

You can delete calendars that are no longer needed.

NOTE Deleting a calendar deletes all events assigned to it.

To delete a calendar, follow these steps.

1. From the **Ektron CMS400.NET** Workarea, click **Modules > Calendar**.
2. Click the calendar you want to delete.
3. Click the Delete button ( ).
4. A confirmation message is displayed.
5. Click **OK**.

Calendar Event Types

Any calendar event can have one or more Event Types assigned to it. An event type might be a meeting, product demonstration, or deadline. When a user views a calendar, he can change the display to view only events that are relevant to him.

This section explains how to manage calendar Event Types through the following subtopics.

- ”Enabling Event Types” on page 557
- ”Viewing Event Types” on page 558
- ”Adding Event Types” on page 558
- ”Editing the Event Type Name” on page 559
- ”Deleting Event Types” on page 559
- ”Assigning an Event Type to an Event” on page 560

Enabling Event Types

To enable event types, edit the calendar and check off the **Event Types Available** box. If desired, you can also check the **Event Types Required** box. This forces the user to specify an event type

when adding a calendar event. *See Also:* "Adding a New Calendar" on page 551

Once event types are enabled, the Manage Event Types button ( ) appears on the toolbar.

Viewing Event Types

To view available Event Types, follow these steps.

1. From the **Ektron CMS400.NET** Workarea, click **Modules > Calendar**.
2. Access the View Calendar screen for the calendar whose event types you want to view.
3. Click Event Types button ( ).

NOTE If the Event Types button does not appear in the toolbar, you must make Event Types available. See "Enabling Event Types" on page 557 for more information.

4. The View Event Types for [Calendar Name] screen is displayed with a list of Event Types.

From this screen, you can add, edit, and delete Event Types.

Adding Event Types

1. Access the Event Types screen, as described in "Viewing Event Types" on page 558.
2. Click the Add button ( ).
3. The Add or Edit an Event Type screen is displayed.
4. Type an Event Type name in the displayed field.
5. Click the Save button ( ).

After you add an Event Type to a calendar, it can be assigned to a calendar event by users. See "Assigning an Event Type to an Event" on page 560 for more information.

Editing the Event Type Name

To edit the name of an event type, follow these steps.

1. Access the View Event Types for [Calendar Name] for the calendar with the Event Type you want to edit, as described in "Viewing Event Types" on page 558.
2. Click the Event Types button ( ).
3. The View Event Types for [Calendar Name] window opens, listing all Event Types.
4. Click the Edit button ( ).
5. The Edit an Event Type screen appears.
6. Click the radio button next to the Event Type you want to edit.
7. Click the Edit button ( ).
8. The Add or Edit an Event Type screen is displayed. Update the Event Type name.
9. Click the Save button ( ).

Deleting Event Types

To delete an event type from a calendar, follow these steps.

1. Access the View Event Types for [Calendar Name] for the calendar with the Event Type you want to delete, as described in "Viewing Event Types" on page 558.
2. Click the Event Types button ( ).
3. The View Event Types for [Calendar Name] window opens, listing all Event Types.
4. Click the Remove button ( ).
5. The Delete Event Types screen displays available Event Types.
6. Check the box next to each Event Type you want to delete.

NOTE Click either **Select All** or **Clear All** to check off all or none of the Event Types.

7. Click the Delete button ( ) to delete the Event Type.
8. A confirmation message is displayed.
9. Click **OK**.

Assigning an Event Type to an Event

After Event Types are available, users can assign them to calendar events. This is described in the **Ektron CMS400.NET** User Manual chapter “Working with Calendars.”

After users assign Event Types to a calendar event, visitors can filter the calendar view by them.

Displaying Calendars on Web Pages

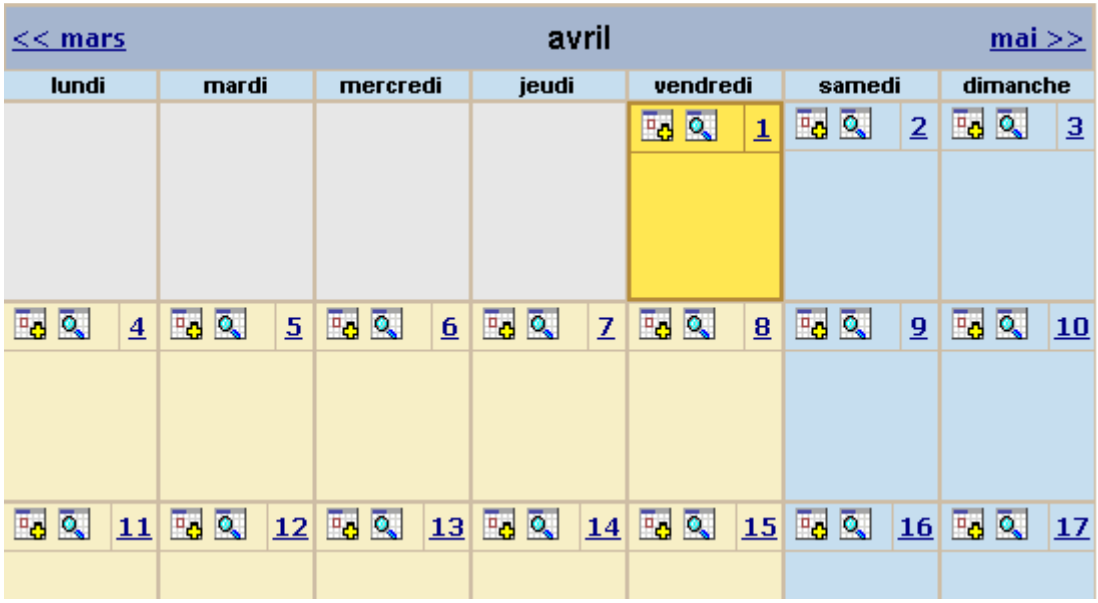
After a calendar is created, it can easily be inserted onto a Web page. For information about inserting calendars into your Web site, refer to the Ektron CMS400.NET Developers Reference Manual.

Creating a Foreign Language Calendar

As part of the comprehensive multi-language features of **Ektron CMS400.NET**, calendars can be created in any supported language.

Exception Microsoft’s .NET platform supports most languages. If a language is not supported by .NET (for example, Welsh), an English calendar appears instead.

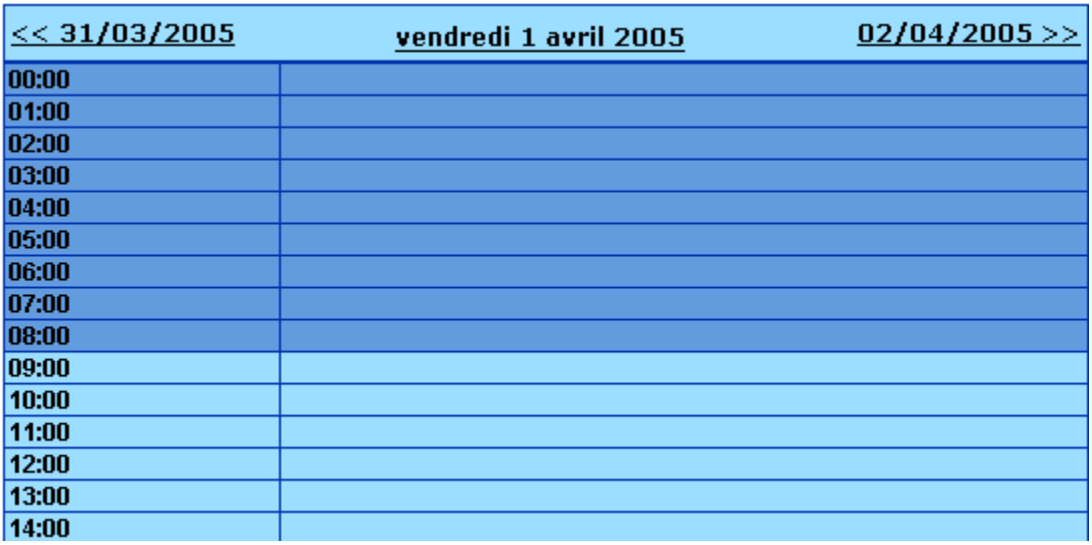
Once you enter the calendar and event information in the foreign language, the calendar display (that is, day and month names) automatically appears in that language. Also, regional conventions for first-last days of the week, and date and time formats are maintained. As an example, see the French calendar below.



Notice that the days and months are translated, and that the week begins on Monday instead of Sunday (as in American English).

And in the daily detail (below), note that date and time format follows French conventions.

WARNING! In order to see foreign characters and accents, the client PC must have support enabled for that language in Windows. For more information, see `http://www.microsoft.com/globaldev/handson/user/xpintlsupp.mspx`.



<< 31/03/2005	vendredi 1 avril 2005	02/04/2005 >>
00:00		
01:00		
02:00		
03:00		
04:00		
05:00		
06:00		
07:00		
08:00		
09:00		
10:00		
11:00		
12:00		
13:00		
14:00		

See Also: "Using an Existing Calendar ID or Creating a New One" on page 562

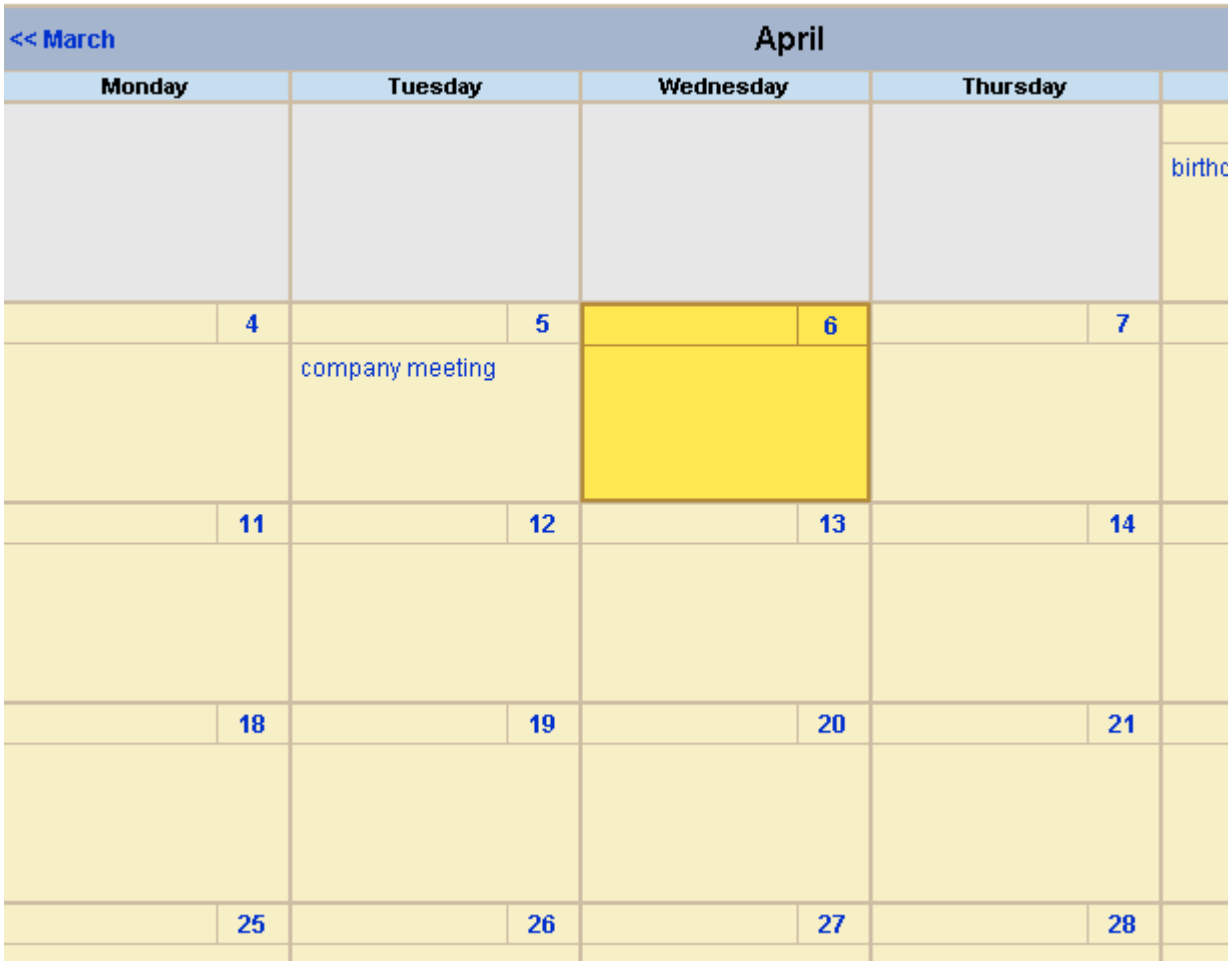
Using an Existing Calendar ID or Creating a New One

When you create a calendar in a foreign language, you can either use an existing calendar ID or create a new one.

Type	Use when...	For more information, see
Foreign language version of existing calendar ID	You want one Web page that displays a calendar in the language selected by the site visitor	"Creating a Multilingual Calendar Using the Same ID" on page 564
New calendar ID	The foreign calendar will be placed on its own Web page; there is no equivalent calendar in the default language	"Creating a Multilingual Calendar Using a New ID" on page 565

For example, the following is the English-language version of the sample calendar provided with the intranet. The URL of the following calendar is

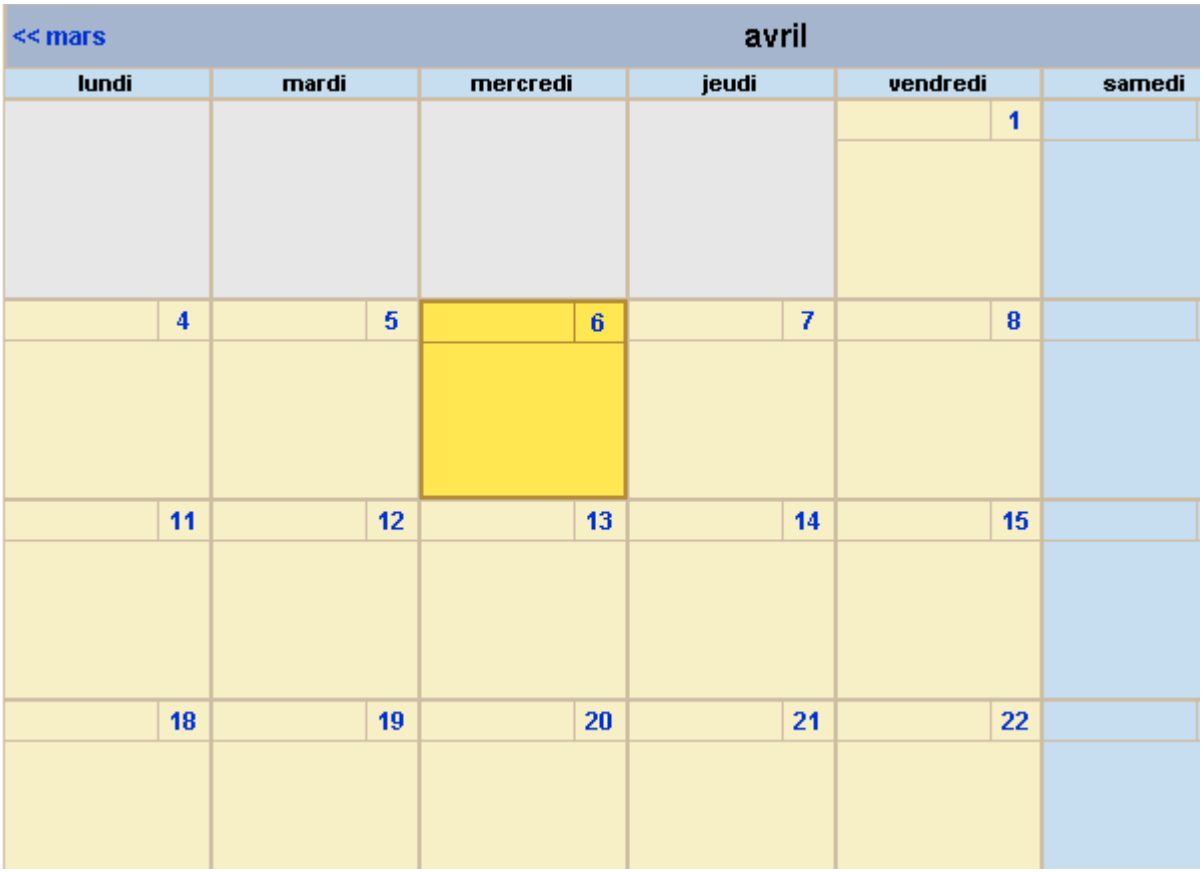
```
http://localhost/CMS400EXAMPLE/intranet/
calendar.aspx?menu_id=15&calendar_id=3&TitleLabel=Company%20Calendar&LangType=1033
```



If you create a French version of that calendar, and a user navigates to the same page but views it in French, he sees the French version of the calendar (below). Note that they are separate calendars with separate event listings -- they only share the ID number.

The URL of the following calendar is

```
http://localhost/CMS400EXAMPLE/intranet/
calendar.aspx?menu_id=15&calendar_id=3&TitleLabel=Company%20Calendar&LangType=1036
```



Creating a Multilingual Calendar Using the Same ID

To create a multilingual calendar using the same ID number but a different language, follow these steps.

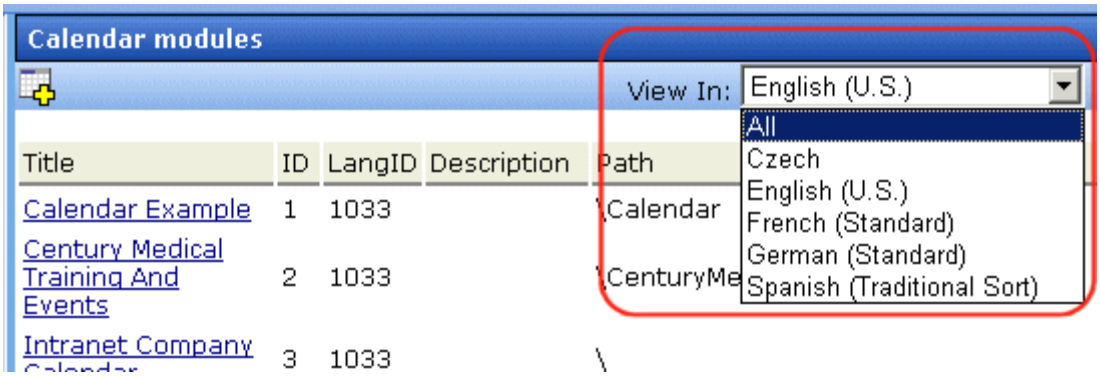
1. Within the Workarea, select **Modules > Calendars**.
2. Select the calendar for which you want to create a version in another language.
3. When the View Calendar Screen appears, pull down the **Add In** box and select the new language.

4. Complete the calendar information, as explained in "Adding a New Calendar" on page 551.

Creating a Multilingual Calendar Using a New ID

To create a multilingual calendar using a unique ID number, follow these steps.

1. Within the Workarea, select **Modules > Calendars**.
2. From the Calendar Modules screen, click to open the **View In** dropdown box.



3. Select the language for the calendar.
4. The Calendar Modules screen reappears, showing only calendars in the selected language (if any exist).

Complete the calendar information, as explained in ”Adding a New Calendar” on page 551.

URL Aliasing

Search engine optimization (SEO) plays a key role in every Web marketing strategy. **Ektron CMS400.NET**'s URL aliasing makes it easy to create descriptive, meaningful and SEO-friendly URL aliases consistently, maximizing your Web site's placement in search results.

For a video introduction to **Ektron CMS400.NET**'s Aliasing feature, go to:

http://media.ektron.com/flash/urlaliasing/480x360/ektronaliasing/ektronaliasing.html

There are four important aspects of URL Aliasing.

- **Automatic Aliasing** - Normally-generated URLs are barely human readable, let alone search engine-friendly. With search engines using the text in a URL to define where a page shows up on a search return, it has never been more important to

have descriptive URLs. While you can manually create aliases that will do the job, CMS400.NET gives you the tools you need to generate them automatically, with consistent structure.

These human-readable URLs are predicable and scalable, following consistent patterns that can apply to all of your sites. The use of words and phrases that actually define the page itself increases these aliases' search engine rankings. By following a pattern, they are scalable, and that pattern can be used across your sites as they grow.

Sites that are currently built migrate easily to CMS400.NET, adopting the new aliasing scheme. No longer do you have to make changes to the web.config, and aliasing can keep old links valid. Once the URL aliasing function is configured and enabled, all content inherits the new aliasing structure.

URL aliases generated by CMS400.NET don't require an extension of how the page is built; search engines find "real" words. Web site performance affects search engine returns as well, and Ektron's URL aliasing takes this into account: these aliases are cached, improving performance.

- **Taxonomy-Based Alias** - URL aliases can be auto-created by **Ektron CMS400.NET** based on the taxonomy of your Web site. It uses the levels of the taxonomy plus the title of the page itself to produce an alias. Search engines will find those words, increasing the page's relevancy in any search for them. And because it is based on the taxonomy (which lets content be established in one-to-many relationships), multiple aliases can be created that will have relevancy to multiple search criteria.
- **Folder-Based Alias** - **Ektron CMS400.NET** can also automate the creation of folder-based URL aliases. Similar to taxonomy-based aliases, deriving an alias from the folder structure produces one that is relevant to the content's actual location. With descriptive folder names and good organization, this produces SEO-friendly addresses comprised of folder structure plus title of page.
- **Manual & RegEx Based Alias** - For some pages with content that follows a pattern, Regex aliasing may be the answer. It looks for a pattern in the current URL, and then replaces it with a different pattern to create a relevant alias. For example, a blog site may be best served by Regex aliases that rely on entry date.

Manual aliasing is also available in **Ektron CMS400.NET**. By enabling it, you can define the pages very specifically, including adding metadata to further improve SEO for that page.

Effects of Aliasing Content

Once your content is aliased, a site visitor can enter either the original URL or the alias into the browser to view the page. Also, if someone selects a content link on your Web page, the alias frequently replaces the original URL in the browser.

Also, when an **Ektron CMS400.NET** user is editing content and inserts a quicklink whose content has several aliases, a screen appears, and he must select one of the aliases. (If only one alias is assigned to the content, it is applied to the quicklink.)

This chapter explains how to alias **Ektron CMS400.NET** content through the following topics.

- ”Benefits of Aliasing” on page 569
- ”Types of URL Aliasing” on page 570
- ”Features Not Supported by Aliasing” on page 572
- ”Aliasing and Relative Links” on page 574
- ”Configuring URL Aliasing” on page 574
- ”Manually Clearing the Cache” on page 585
- ”Automatic URL Aliasing” on page 588
- ”Manual Aliasing” on page 597
- ”Using RegEx Expressions” on page 608
- ”Site Aliasing” on page 613
- ”Upgrading from Previous Releases” on page 617
- ”Assigning an Alias to Multi-Language Content” on page 617
- ”Using Classic ASP with Windows 2008 Server 64 Bit” on page 618

Benefits of Aliasing

Here are some examples of why you’d want to alias **Ektron CMS400.NET** pages.

- To provide shorter, more user-friendly URLs, which map to longer paths. For example, `www.ektron.com/training/` may be preferable for marketing materials.
- If you have a PHP site, you can alias all php pages and use the same query string names to pass needed information to the new .aspx pages.

NOTE Any query strings appended to an aliased page pass to the .aspx page and may be used if necessary.

- If you have a static Web site (for example, all HTML pages) that is indexed in a search engine, you can alias your site and retain complete content management without affecting your search engine ranking.
- Some search engines work better without the URL parameters that make up an **Ektron CMS400.NET** Web page name. URL Aliasing creates page names that search engines might more easily recognize.

Types of URL Aliasing

There are three types of URL aliasing, described below.

- **Automatic Aliasing** - can automatically change the page name format of a group of content blocks. You determine the group by selecting a taxonomy or a top-level **Ektron CMS400.NET** folder.

  For example, you might choose a folder and alias its content using the content title followed by slash (/). So, while the original URL might be `www.example.com/Human_resources/Postings/hr.aspx?id=8745`, the aliased one might be `www.example.com/jobs/`.

  For more information, see "Automatic URL Aliasing" on page 588.
- **Manual Aliasing** - You can manually alias any content block using whatever unique name you wish. For example, you can alias your technical support page as `www.example.com/help.htm`, even though its real name is `www.example.com/help.aspx?id=27`.

  You can assign several manual aliases to content then decide which one is the primary. For more information, see "Manual Aliasing" on page 597.

If both alias types are provided for a content item, a user can enter any alias into the browser address field to access that content. If someone hovers the cursor over (or clicks) a link to aliased content, the primary manual alias appears.

- **Site Aliasing** - If your site supports the multi-site feature (see "Multi-Site Support" on page 1006), you can enter aliases for any site. For example, your company's name just changed from Bionics to NewGen. You could use the site aliasing feature to resolve the URL `www.bionics.com` to `www.newgen.com`. For more information, see "Site Aliasing" on page 613.

Example of an Alias in the Browser

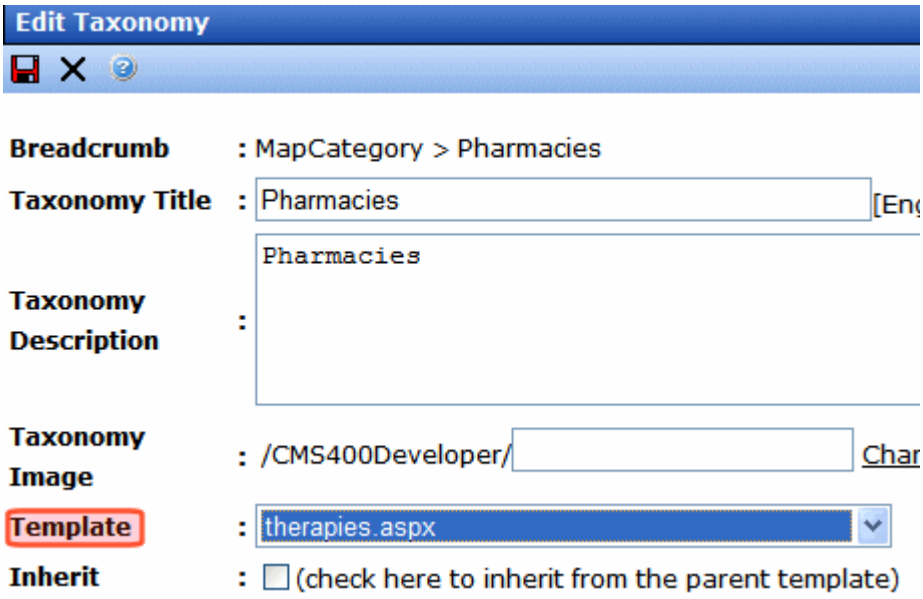
SOME WORDS ABOUT US
As a global leader, ektron Medical strives to improve lives in its local and global communities, particularly with regard to increasing access to high-quality healthcare for underserved populations. It is a
LATEST NEWS
Ektron Rated Positive
Ektron Rated Positive by Leading Analyst Firm Amhers
N.H. – December 13, 2005 –
Ektron Inc., an innovator in
content management softwa
http://icestorm/CMS400Developer/news.aspx?id=32
Trusted sites
Without an alias, you see the quicklink at the bottom of the browser
SOME WORDS ABOUT US
As a global leader, ektron Medical strives to improve lives in its local and global communities, particularly with regard to increasing access to high-quality healthcare for
LATEST NEWS
Ektron Rated Positive
Ektron to Demonstrate Healthcare
"Healthcare Content Indexi
Framework" which enables
http://icestorm/CMS400Developer/review.aspx
Trusted sites
With an alias, you see the primary alias name at the bottom of the browser

Features Not Supported by Aliasing

Aliasing is not supported in the following areas of **Ektron CMS400.NET**.

- search results
- images

- content in root folder * (cannot be automatically aliased, although you can alias it manually and by taxonomy)
- forums (discussion boards) * (links within forum posts can be aliased)
- forms/polls/surveys *- the form is aliased but the postback screen is not (for a workaround, see http://weblogs.asp.net/scottgu/archive/2007/02/26/tip-trick-url-rewriting-with-asp-net.aspx > “Handling ASP.NET PostBacks with URL Rewriting”)
- a link to an HTML form
- content links within the directory server control
- If a template is assigned to a taxonomy (see below), the template takes precedence over an alias for content found by a directory server control


Edit Taxonomy
Breadcrumb : MapCategory > Pharmacies
Taxonomy Title : Pharmacies
Pharmacies
Taxonomy Description :
Taxonomy Image : /CMS400Developer/
Template : therapies.aspx
Inherit : (check here to inherit from the parent template)

* - looking to support in future release

- eCommerce - items in a Shopping Cart control use an alias *unless* you assign an .aspx page in the control’s `TemplateProduct` property. If you assign a page there, that page is used in the product’s URL, not the alias.

- If you enable .asp as an extension, the alias does not appear when a site visitor hovers the cursor over an *asset*. Instead, the actual file name appears. *See Also:* "Extension" on page 578

  If a site visitor hovers the cursor over HTML content, the alias does appear.
- The alias does not appear when a site visitor viewing an RSS page hovers the cursor over an *asset*. Instead, the actual file name appears.
- You cannot create an alias based on a taxonomy whose name includes `assets` or `privateassets`.

Aliasing and Relative Links

After you enable Aliasing, any relative links embedded in your Web pages that are not preceded by a slash (/) may demonstrate symptoms such as:

- Runtime error notifications
- Broken images (you see a red X where the image should be)
- Missing text styling

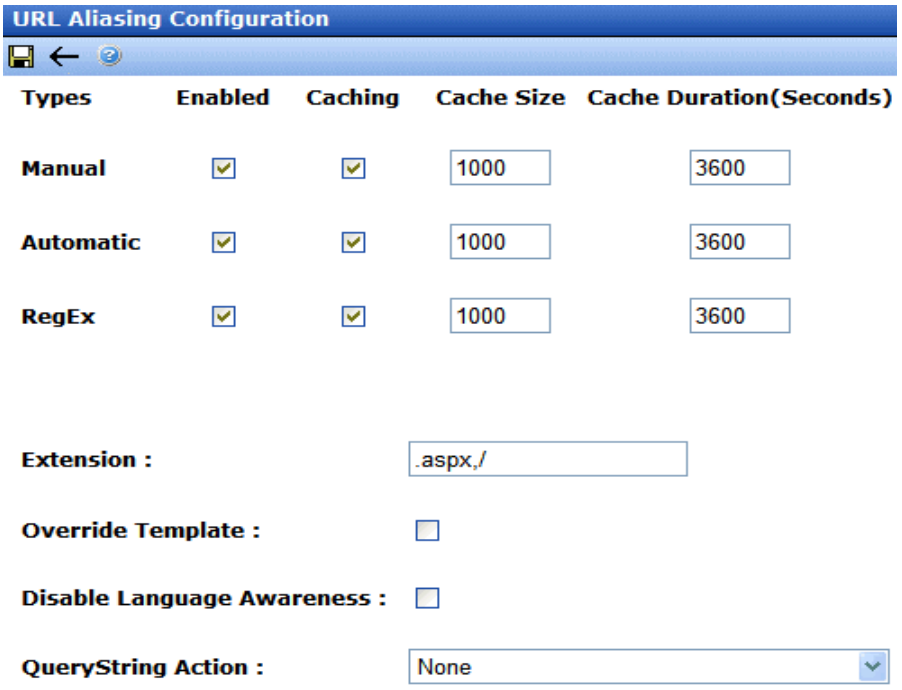
The following **Ektron CMS400.NET** Knowledge Base article analyzes this problem and presents solutions: `http://dev.ektron.com/kb_article.aspx?id=19254`.

Configuring URL Aliasing

Before you can set up aliases, you must enable the features using the URL Aliasing Configuration screen (shown below).

See Also:

- "Manually Clearing the Cache" on page 585
- "Setting Default Documents" on page 586



WARNING! If you performed a database sync and the site being synched uses URL aliasing, you must go to its URL Aliasing Configuration screen and click the Refresh button ( ) to update its aliasing information.

To edit the Aliasing Configuration screen, go to **Ektron CMS400.NET Workarea > Settings > Configuration > URL Aliasing > Settings**. Then, click the Edit button ( ).

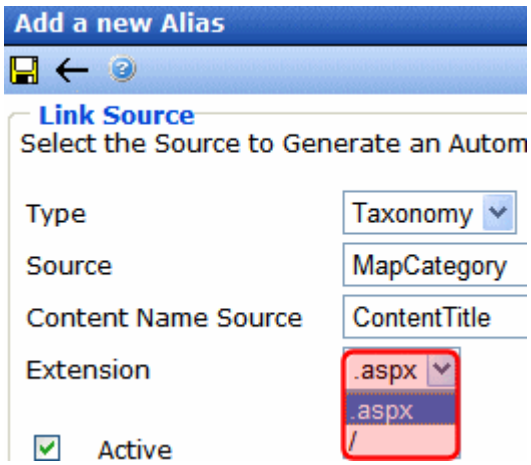
NOTE After changing the configuration screen, if your Ektron CMS400.NET supports multi-site configurations, you must log into each site, navigate to the URL Aliasing Configuration screen, and click the Refresh button ( ).

Use the following table to complete the screen.

Field	Description
Manual	

Field	Description
Enabled	Check this box to enable manual aliasing. *See Also:* "Manual Aliasing" on page 597
Caching	Check this box to improve your server's performance. It minimizes the number of database hits by placing all manual aliasing information in your server's memory. Note: A developer might want to uncheck this box while developing a site, to make sure that everything is coming out of the database.
Cache Size	If you checked the **Manual Caching** box, enter the maximum number of manual aliases that your server will cache. By default, this is set to 1000. An alias is cached whenever anyone uses it. It remains in the cache for the number of seconds set in the **Cache Duration** field. If more than this number of aliases needs to be added to the cache, **Ektron CMS400.NET** makes room for new ones by removing aliases that have been in the cache for the longest time. If you increase the number, it is possible that your performance will improve. But at some point, the size of the cache may degrade your server's performance. *See Also:* "Manually Clearing the Cache" on page 585
Cache Duration (Seconds)	Enter the number of seconds for which any alias is retained in the server's cache. After this number of seconds has passed, the alias is flushed from the cache. *See Also:* "Manually Clearing the Cache" on page 585 Note: If your **Ektron CMS400.NET** supports multi-site configurations, this setting only affects the site to which you are logged on. To set a cache duration for other sites, sign in to each site's **Workarea > Settings > Url Aliasing > Settings**, then set its cache duration values.
Automatic	
Enabled	Check this box to enable automatic aliasing. *See Also:* "Automatic URL Aliasing" on page 588
Caching	Check this box to improve your server's performance. It minimizes the number of database hits by placing the most frequently used automatic aliases in your server's memory. You set the number of cached automatic aliases at the **Automatic Alias Cache Size** field.

Field	Description
Cache Size	If you checked the **Automatic Caching** box, enter the maximum number of automatic aliases that your server will cache. By default, this is set to 1000. An alias is cached whenever anyone uses it. It remains in the cache for the number of seconds set in the **Cache Duration** field. If more than this number of aliases needs to be added to the cache, **Ektron CMS400.NET** makes room for new ones by removing aliases that have been in the cache for the longest time. If you increase the number, it is possible that your performance will improve. But at some point, the size of the cache may degrade your server's performance. *See Also:* "Manually Clearing the Cache" on page 585
Cache Duration (Seconds)	Enter the number of seconds for which any alias is retained in the server's cache. After this number of seconds has passed, the alias is flushed from the cache. *See Also:* "Manually Clearing the Cache" on page 585
RegEx	
Enabled	Check this box to enable the RegEx feature. *See Also:* "Using RegEx Expressions" on page 608
Caching	Check this box to improve your server's performance. It minimizes the number of database hits by placing the most frequently used RegEx aliases in your server's memory. You set the number of cached aliases at the **RegEx Cache Size** field.
Cache Size	If you checked the **RegEx Caching** box, enter the maximum number of RegEx aliases that your server will cache. By default, this is set to 1000. An alias is cached whenever anyone uses it. It remains in the cache for the number of seconds set in the **Cache Duration** field. If more than this number of aliases needs to be added to the cache, **Ektron CMS400.NET** makes room for new ones by removing aliases that have been in the cache for the longest time. If you increase the number, it is possible that your performance will improve. But at some point, the size of the cache may degrade your server's performance. *See Also:* "Manually Clearing the Cache" on page 585
Cache Duration (Seconds)	Enter the number of seconds for which any alias is retained in the server's cache. After this number of seconds has passed, the alias is flushed from the cache. *See Also:* "Manually Clearing the Cache" on page 585

Field	Description
Extension	Enter file extensions of pages for which aliases can be created. Begin each extension with a period (.), and separate them with a comma (,). By default, **Ektron CMS400.NET** supplies the following extensions. • .aspx • / (the slash is actually the lack of an extension at the end of a page's name) If you are editing this screen and delete an extension, all aliases that use it are immediately disabled. **Where Extensions Appear** The values in this field appear as dropdowns in the Add a New Manual Alias and Add a New Automatic Alias screens.  *See Also:* "Restrictions on Extensions" on page 580
Override Template	A template and an alias can have the same name, for example, www.example.com/dynamic.aspx. If this happens, and a site visitor types such an address into the browser, this check box determines if the template page or the alias appears. If this box is checked, the alias appears instead of the template. Note: The template must be defined within the Workarea Settings > Template Configuration screen.

Field	Description
Disable Language Awareness	Use this check box to determine what happens under the following conditions: 1. A site visitor browses to content using an alias. 2. The site visitor changes the site language. If this box is *checked* - If the content exists in the new language, it appears. If not the content appears in the original language. If this box is *unchecked* - Site visitor sees a 404 error. Examples if box is checked and a site visitor browses to content using an alias. • Content ID 33 exists in both English and Spanish. Site visitor views this content in English then switches the site language to Spanish. The Spanish version of content ID 33 appears. • (Assume English is the default language). Content ID does not exist in German. Site visitor views this content in English then switches the site language to German. The English content appears.

Field	Description

Query String Action	Use this field to set up a rule to handle an alias's query string parameters. You can set one rule for your entire site (via this field), and separate ones that override the system-wide rule for specific manual aliases (using the Manual Aliased Page Name Maintenance screen).
	Four options are available.
	• **None** - If an aliased URL has a query string, it is ignored. Any query string on the target URL is used.
	• **Resolve matched parameters within alias** - **Ektron CMS400.NET** tries to resolve matching parameters (it is case sensitive). If a match is found, the alias's query string parameter takes precedence. Example:
	`alias's query string parameter:`
	`http://www.example.com/Contact.aspx?id=84`
	`Target: http://www.example.com/aboutus.aspx?id=35&UserId=10`
	`Result: http://www.example.com/aboutus.aspx?id=84&UserId=10`
	(id=35 is replaced by id=84 since it matched the query string parameter. UserId=10 was not affected because it did not match the alias query string parameter.)
	• **Replace all parameters within alias** - **Ektron CMS400.NET** replaces all of a target's query parameters with the alias' s query parameter. Example:
	`alias's query string parameter:`
	`http://www.ektron.com/Contact.aspx?id=84`
	`Target: http://www.ektron.com/aboutus.aspx?id=35&Userid=1`
	`Result: http://www.ektron.com/aboutus.aspx?id=84`
	(The target parameters id=35&Userid=1 are replaced by the alias parameter id=84)
	• **Append parameters to alias - Ektron CMS400.NET** appends the alias's parameters to the target URL. Example:
	`Alias: http://www.ektron.com/Contact.aspx?id=84&lang=1033`
	`Target: http://www.ektron.com/aboutus.aspx?id=35&Userid=1`
	`Result: http://www.ektron.com/aboutus.aspx?id=35&Userid=1 & id=84&lang=1033`
	(The parameter from the alias is appended to the target)

Restrictions on Extensions

NOTE The following restrictions only apply if your server runs IIS7.

This section explains how IIS7 handles Web page extensions other than .aspx. There are two scenarios.

- Some of your site's pages have non-.aspx extensions. So, IIS7 needs to handle requests for those pages. See "Your Site Has non-aspx Pages" on page 581.

- You site previously had non-.aspx pages but no longer does. You want to set up aliases for these pages, so site visitors' bookmarks will still work. See "You Want to Set up Aliases for non-aspx Pages" on page 583.

Your Site Has non-aspx Pages

If any of your site's pages have extensions other than .aspx (for example, .asp, .php, .cfm), follow these steps to move them above ek* in the Handler Mappings list. (Extensions below **ek*** are handled by aliasing.)

1. Open IIS7.
2. Right click your Web site.
3. Click **Handler Mappings**.
4. Click **View Ordered List**.
5. Move non-aspx extensions used on your site above **ek***. For example, if your site uses .asp pages, move **ASPclassic** above **ek***. See below.

Handler Mappings
Use this feature to specify the resources, such as DLLs and managed co
Name
Path
ScriptResource
ScriptResource.ax
ScriptHandlerFactoryAppServices
*_AppService.axd
ScriptHandlerFactory
*.asmx
rules-Integrated
*.rules
rules-ISAPI-2.0
*.rules
xoml-Integrated
*.xoml
xoml-ISAPI-2.0
*.xoml
TraceHandler-Integrated
trace.axd
WebAdminHandler-Integrated
WebAdmin.axd
AssemblyResourceLoader-Integrated
WebResource.axd
WorkareaHandler
*/WorkArea/Cont
EktronContentDesignerHandler
*/WorkArea/Cont
EktronShowContentHandler
*/WorkArea/show
EktronAspxHandler
*.aspx
EktronHtmHandler
*.htm
EktronHtmlHandler
*.html
PageHandlerFactory-Integrated
*.aspx
SimpleHandlerFactory-Integrated
*.ashx
HttpRemotingHandlerFactory-rem-Integrated
*.rem
HttpRemotingHandlerFactory-soap-Integrated
*.soap
EktronWorkflowImage
*/wfactivities.png
AXD-ISAPI-2.0
*.axd
PageHandlerFactory-ISAPI-2.0
*.aspx
SimpleHandlerFactory-ISAPI-2.0
*.ashx
WebServiceHandlerFactory-ISAPI-2.0
*.asmx
HttpRemotingHandlerFactory-rem-ISAPI-2.0
*.rem
HttpRemotingHandlerFactory-soap-ISAPI-2.0
*.soap
SecurityCertificate
*.cer
TRACEVerbHandler
*
ISAPI-dll
*.dll
ASPClassic
*.asp
ek*
*

Once you do this, you *cannot* use these extensions as part of an alias. So, do *not* enter them into the **Extension** field of the URL Aliasing Configuration screen.

You Want to Set up Aliases for non-aspx Pages

If you want to use extensions other than .aspx for aliasing Web pages, follow these steps.

1. Open IIS7.
2. Right click your Web site.
3. Click **Handler Mappings**.
4. Click **View Ordered List**.
5. On the Handler Mappings screen, move non-aspx extensions that you want to alias below **ek***. For example, if your site uses .asp pages, move **ASPclassic** below **ek***.
6. Enter the extensions in the **Extension** field of the URL Aliasing Configuration screen. *See Also:* "Configuring URL Aliasing" on page 574

Activating Custom Extensions

By default, **Ektron CMS400.NET** supplies the following extensions.

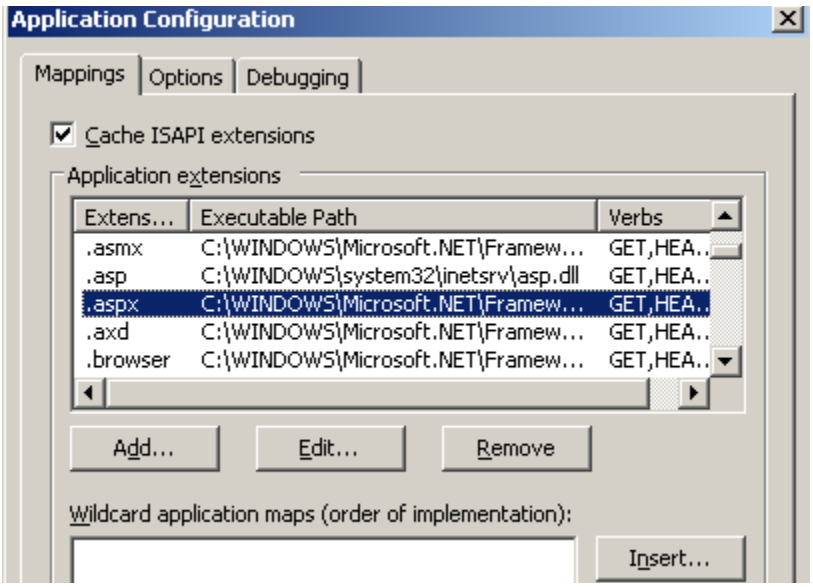
- .aspx
- / (the slash is actually the lack of an extension at the end of a page's name)

If you want to enable other extensions, follow these steps.

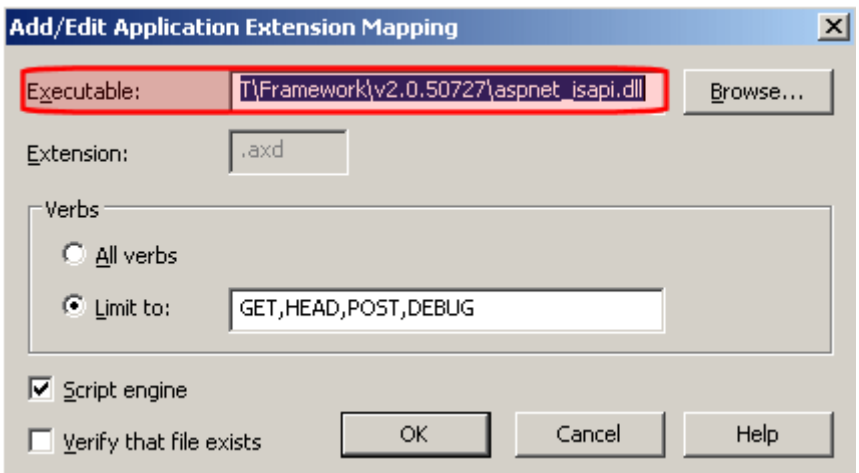
1. Go to the **Ektron CMS400.NET Workarea > Settings > Configuration > URL Aliasing > Settings** screen.
2. Enter the new extension into the **Extension** field and click Save ( ). *See Also:* "Extension" on page 578
3. If Wildcard Mapping in IIS is turned on, you are done.

   If Wildcard Mapping in IIS is turned off, you must enter the new extension into IIS. To do this, go to the Windows **Start** button > **Administrative Tools > IIS manager**.
4. Open the **Web Sites** folder, right click your Web site then choose **Properties**.

5. Click the **Home Directory** tab.
6. Click the **Configuration** button.
7. Scroll down to and double click the .aspx extension.

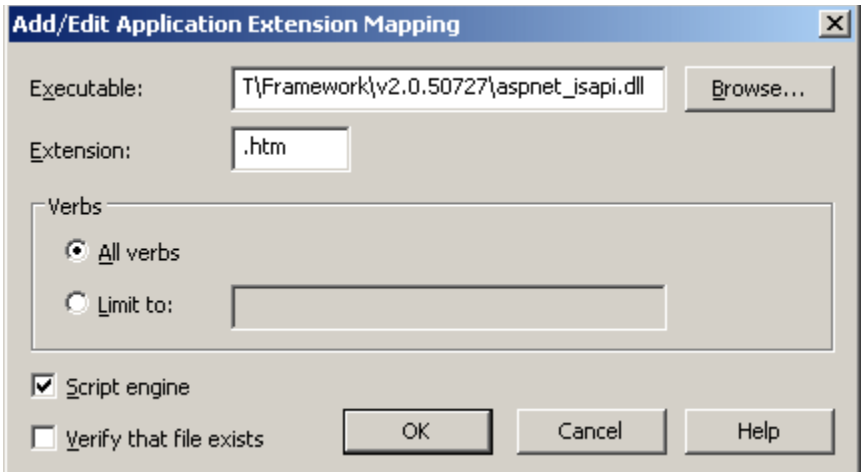


8. Copy the path to aspnet_isapi.dll. (The path is found in the Executable field.)



9. On the Application Configuration window, click **Add**.
10. The Add/Edit Application Extension Mapping screen appears.

11. In the **Executable** field, paste the path to aspnet_isapi.dll (which you copied in Step 8).
12. In the **Extension** field, enter the extension that you are activating. See example below.



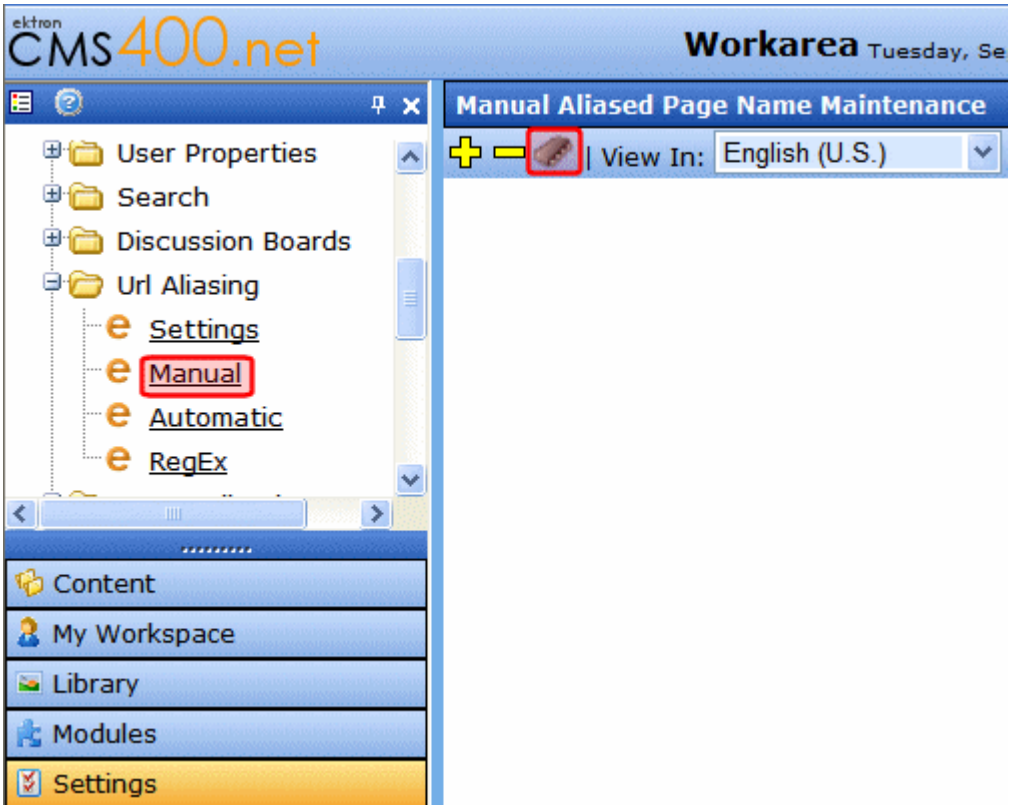
13. Uncheck the **Verify that file exists** checkbox.
14. Click **OK**.

Manually Clearing the Cache

Each aliasing type (Automatic, Manual, and RegEx) has **Cache Size** and **Cache Duration** fields, which let you determine conditions that automatically clear each cache. However, you can manually clear a cache at any time. To do so, follow these steps.

WARNING! If your Ektron CMS400.NET supports multi-site configurations, you must sign in to each site's Workarea, then manually clear its cache.

1. Click the appropriate **Settings > URL Aliasing** screen. For example, to clear the Manual Aliasing cache, click **Settings > URL Aliasing > Manual**.

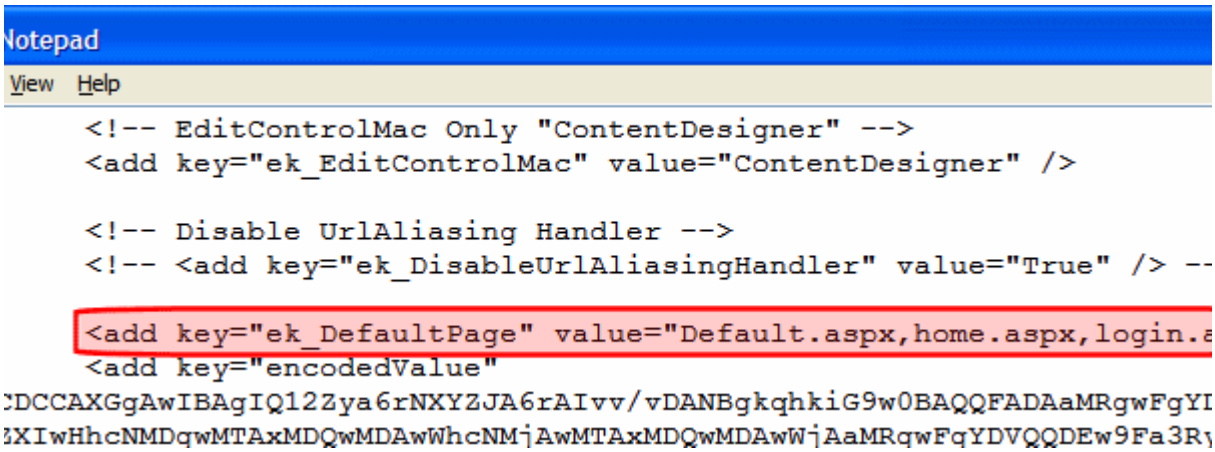


2. Click the Clear Cache button ( ).

Setting Default Documents

The concept of default document is explained in the following Microsoft KB article: http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/dc6eb1b4-9028-4308-9935-52b64edfad36.mspx. Essentially, it lets you establish a default document for client requests to a Web site that do not specify a document name. For example, `www.example.com/jobs`. If the default document is `default.aspx`, this URL resolves to `www.example.com/jobs/default.aspx`.

When using **Ektron CMS400.NET** Release 7.6 or higher, you identify one or more default documents in the *siteroot*/web.config file's `ek_DefaultPage` element (shown below).



NOTE The `ek_DefaultPage` element determines your Web site's default document whether or not you are using URL Aliasing.

So when a site visitor enters an address that includes your domain but no page name, **Ektron CMS400.NET** refers to `ek_DefaultPage`'s values. In the above example, the first page is default.aspx. If found, that page displays. If not, it looks for the second page listed, etc.

If none of the pages is found or a page is not specified in `ek_DefaultPage`, what happens next depends on the IIS version that your server is running.

IIS version	Result if pages listed in `ek_DefaultPage` are not found
6	• if `ek_DefaultPage` is blank in web.config, default documents listed in IIS6 are used. • if `ek_DefaultPage` has one or more pages but none of them exists on the server, a Page not Found (404) message appears.
7	**Page not found** message appears in browser. Because **Ektron CMS400.NET** assumes responsibility for letting you define the default document, default documents specified in IIS 7 are ignored.

Automatic URL Aliasing

Automatic aliasing lets you assign an alias to several content items at once. You identify content by either taxonomy or folder. Then, select additional elements of the alias pattern and save all information as a *configuration.*

You can create one automatic aliasing configuration for each folder or taxonomy. Since a single content block can be assigned to several taxonomies, it can have many automatic aliases.

When an automatic alias configuration is activated, an alias is assigned to all content in the taxonomy or folder (and its subfolders). From then on, that content can be identified by its automatic alias. In addition, any content added to the folder/ taxonomy in the future will be assigned that alias as long as the configuration is active.

Automatic Aliasing is further described through the following topics.

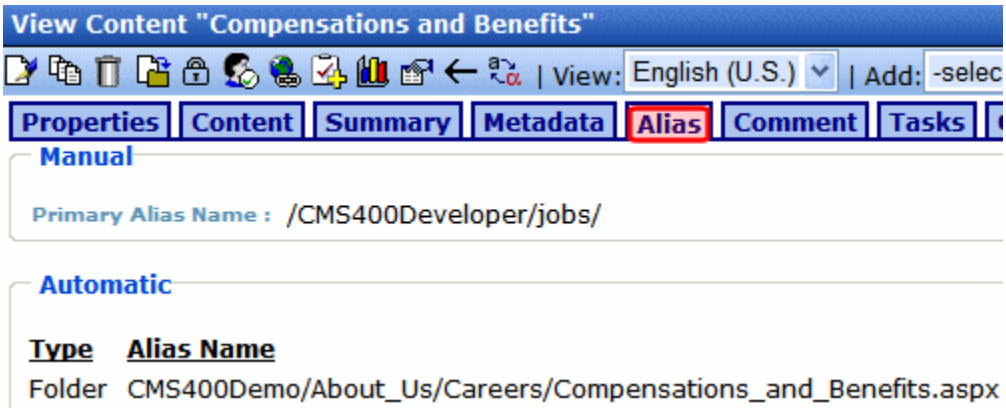
- ”Permissions for Working with Aliasing” on page 588
- ”Enabling/Disabling Automatic URL Aliasing” on page 589
- ”Setting up Automatic Aliasing” on page 590
- ”Viewing and Editing Automatic Alias Configuration” on page 595
- ”Inactivating an Automatic Aliasing Configuration” on page 596
- ”Deleting an Automatic Aliasing Configuration” on page 596

Permissions for Working with Aliasing

Members of the Administrators group or those assigned to the Alias-Admin Role have full permissions to work with aliasing. They can do things like

- Turn aliasing on and off
- View all manual aliases
- Activate or deactivate manual aliases
- Change the primary alias
- Create automatic aliases

- Create RegEx aliases



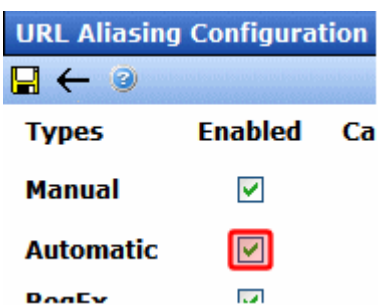
To give a user a limited ability to work with aliasing, you can assign them the Alias-Edit role. These users can only

- view and assign a manual alias to content
- view secondary aliases assigned to content

See Also: "Using the Roles Screens" on page 796

Enabling/Disabling Automatic URL Aliasing

To enable automatic aliasing, follow this path: **Settings > Configuration > URL Aliasing > Settings**. The screen indicates if automatic aliasing is currently on or off.



To change its state, click the Edit button (), check or uncheck the box, and click the Save button ().

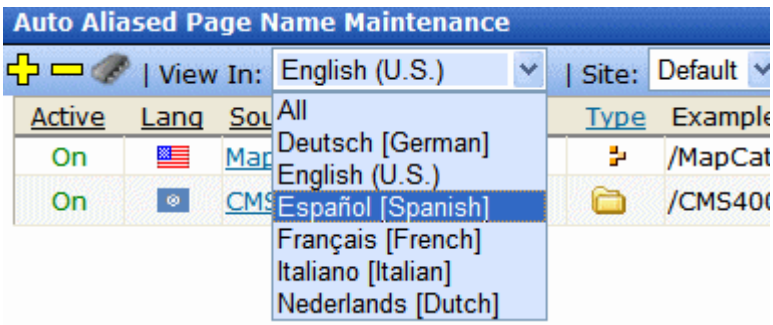
Setting up Automatic Aliasing

After enabling automatic URL aliasing, you can create a *configuration*, which lets you

- identify the content source (that is, a taxonomy or a folder)
- choose elements of the aliasing pattern
- preview sample original and aliased URLs

To create an automatic alias configuration, follow these steps.

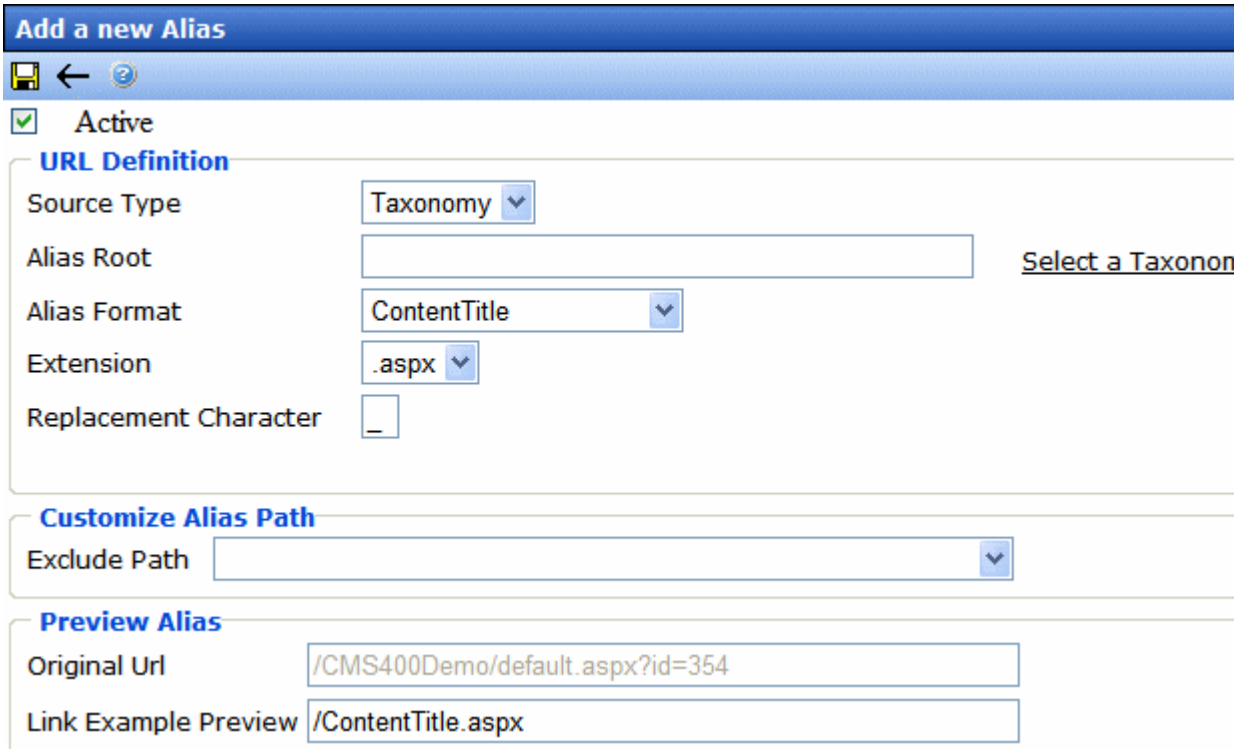
1. Open the **Settings > Configuration > URL Aliasing > Automatic** screen.
2. If you are creating an alias based on Taxonomy, select its language from the language dropdown.



If you creating an alias based on folder, go to Step 3.

NOTE On the Auto Aliased Page Name Maintenance screen, a folder-based alias' **Lang** column shows a United Nations flag ( ). This indicates that folders are language-neutral.

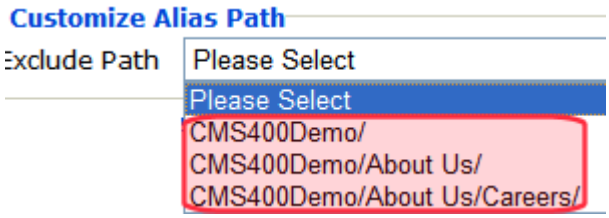
3. Click the plus sign ( ) to access the Add a New Alias screen (shown below).



4. Use the following table to complete the screen.

Field	Description
Active	Check this box to apply this configuration to content. If you do, the aliases are applied when you save the screen. If you uncheck this box, automatic aliases set up via this configuration are deleted from the associated content.
Source Type	Automatic aliases are based on either a taxonomy or a folder. Choose one.

Field	Description
Alias Root	Navigate to and choose a taxonomy or folder to which you want to assign an automatic alias. If you choose a **taxonomy**, the automatic alias is applied to all content assigned to it and all of its child nodes. *See Also:* "Taxonomy" on page 642 Furthermore, if your Ektron CMS400.NET supports multi-site configurations, the automatic alias will apply to content in all sites. This is because taxonomy is site independent. Note: If the language selector was set to **All** on the Auto Aliased Page Name Maintenance screen, and you chose **Taxonomy** as the **Source Type**, **No Taxonomy** appears here. This indicates that you must return to the Auto Aliased Page Name Maintenance screen and select a language before you can select a taxonomy as the Alias Root. If you choose **folder**, the automatic alias applies to all content in that folder and its subfolders. *See Also:* "Managing Content Folders" on page 34 The taxonomy or folder is part of the automatic alias pattern. *See Also:* "The Automatic Alias Pattern" on page 594
Alias Format	Use this field to help construct the automatic alias pattern. Choose one of the following items to identify the content within the alias. **ContentTitle** - Example: `Sample Content Block` **ContentID** - Example: `30` **ContentIDandLanguage** - Example: `30/1033` *See Also:* "The Automatic Alias Pattern" on page 594
Extension	Use this field to help construct the automatic alias pattern. Choose an extension from the list to identify the end of the aliased URL. Extensions are defined in the **Extension** field of the URL Aliasing Configuration screen. *See Also:* "The Automatic Alias Pattern" on page 594; "Configuring URL Aliasing" on page 574

Field	Description
Replacement Character	Enter the character that replaces prohibited characters in content titles when they appear within an automatic alias. Examples of prohibited characters are a space and question mark (?). So, for example, if the content title is `About Us`, and you enter an underscore (-) here, the aliased version of the title is `About_Us`. You cannot enter one of the following as the replacement character: [, \ / < > (Space) : | ? '] # * & % Note: If you're using IIS7 (Microsoft Vista or Server 2008), and specify a plus sign (+), you get this error: `HTTP Error 404.11 Not Found The request filtering module is configured to deny a request that contains a double escape sequence`. For a solution, see http://support.microsoft.com/kb/942076/en-us.
Customize Alias Path	By default, the automatic alias pattern displays all folders or taxonomy levels from the top to the level you select. (*See Also:* "The Automatic Alias Pattern" on page 594) You can use this field to control which folders/taxonomy levels appear in the pattern. For example, your Alias Root is based on the following folder path: `/CMS400Demo/About Us/Careers`. Using this field, you can choose any of the following to indicate the folder or taxonomy path in the automatic alias pattern. 
Preview Alias	This area of the screen displays • a sample **Original URL** • an aliased example of that URL, based on the information entered on the screen To see any content item's fully aliased URL, navigate to it and click its **Alias** tab.

Uniqueness Requirement for Automatic Alias Configuration

A configuration must have a unique combination of Source Type, Alias Root, Alias Format, and Extension. For example

- **Source Type** = taxonomy
- **Alias Root** = the taxonomy named Products
- **Alias Format** = Content title
- **Extension**

You cannot create a configuration whose values match an existing one.

The Automatic Alias Pattern

The Automatic Alias pattern combines the following elements in this order. Each element is separated by a slash (/).

1. site root
2. folder or taxonomy path (Spaces are replaced by the **Replacement Character** specified on the Add/Edit Alias screen).

NOTE Either a taxonomy or a folder is selected when creating an automatic aliasing configuration.

By default, a *taxonomy path* has all taxonomy nodes from the top to the level at which content is assigned. Here is an example: `www.example.com/Medical_Conditions/Kidney_Disease/`.

By default, a *folder path* has all folders from the top-level to the folder that contains the content. Here is an example: `www.example.com/CMS400Developer/CMS400Demo/About_Us/Company_Profile/Board_of_Directors.aspx`.

NOTE You can use the **Customize Alias Path** field to determine which path components appear in the pattern. *See Also:* "Customize Alias Path" on page 593

3. content name source (Spaces are replaced by the **Replacement Character** specified on the Add/Edit Alias screen)
4. extension

Examples:

Folder-based automatic alias

```
www.example.com/CMS400Demo/About_Us/Company_Profile/Awards_and_Honors/
www.example.com/CMS400Demo/About_Us/Company_Profile/12548/
www.example.com/CMS400Demo/About_Us/Company_Profile/12584/1033
```

Taxonomy-based automatic alias

```
www.example.com/cms400/MapCategory/Restaurant/Chinese/You_You_Japanese_Bistro/
```

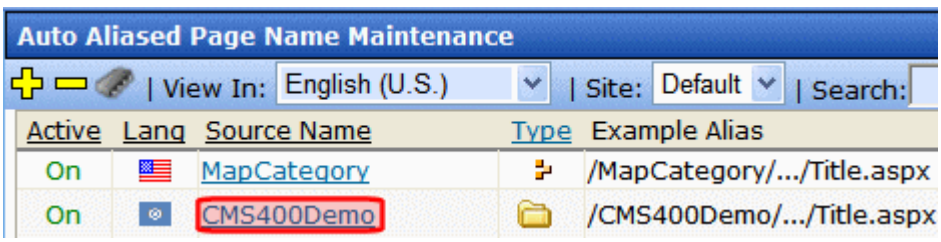
NOTE Ektron CMS400.NET lets users create content with the same title in different folders. If an automatic alias based on a taxonomy is created, and the same taxonomy node is applied to two content items with the same title, both items will have the same automatic alias. To avoid this problem, do not allow users to assign the same name to more than one content item.

Viewing and Editing Automatic Alias Configuration

To view and edit an automatic alias configuration, go to the **Settings > Configuration > URL Aliasing > Automatic** screen.

TIP! Use the screen's language selector to find taxonomy-based configurations of a selected language.

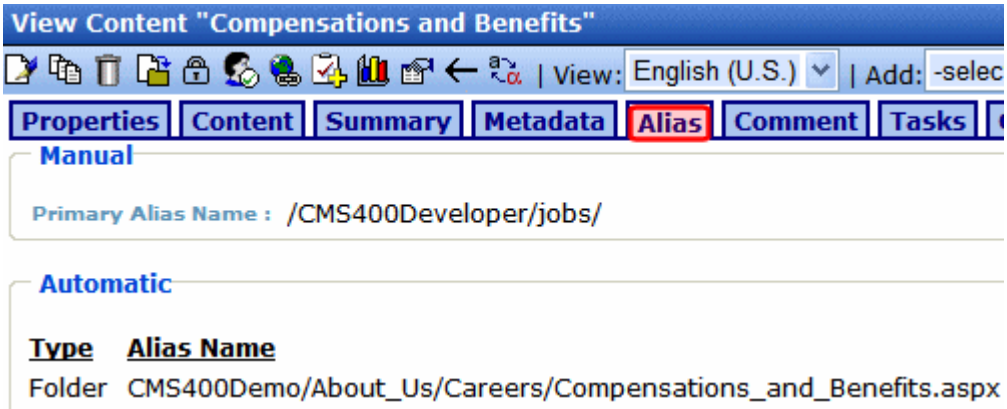
From the Auto Aliased Page Name Maintenance screen, click the alias configuration that you want to view.



To edit an automatic alias, view it then click the Edit button (). To learn about the screen's fields, see "Use the following table to complete the screen." on page 591.

Viewing an Automatic Alias

To view the automatic alias assigned to a specific content item, navigate to and view the content. Then, click the **Alias** tab (shown below). A primary manual alias appears near the top, followed by all automatic aliases.



Inactivating an Automatic Aliasing Configuration

Follow these steps if you want to temporarily inactivate an automatic alias configuration. When you do, automatic aliases created by that configuration are removed from all content to which they are applied. The configuration is saved, so if you later want to reactive it, simply undo these steps.

1. Open the **Settings > Configuration > URL Aliasing > Automatic** screen.
2. Click the alias that you want to inactivate.
3. Click the Edit button ( ).
4. Uncheck the **Active** checkbox.
5. Click the Save button ( ).

Deleting an Automatic Aliasing Configuration

Follow these steps if you want to delete an Automatic Aliasing Configuration. When you do, automatic aliases are removed from all content to which they are applied.

1. Open the **Settings > Configuration > URL Aliasing > Automatic** screen.
2. Click the delete button ( ).
3. Check each configuration that you want to delete.

4. Click the delete button ( ).
5. You are asked if you are sure.
6. Click **OK**.

Manual Aliasing

When using manual aliasing, you choose a page name. Next, you specify the content to appear whenever anyone enters the URL using that name into a browser address field. For example, you can alias `www.example.com/cms/index.aspx` as `www.example.com/cms/Launch.html`. From then on, the content can be identified either by its original URL or its alias.

You can assign any number manual of aliases to a content block.

NOTE You cannot manually alias the root of your Web site (for example, www.*example*.com). You can, however, alias everything below that.

This section explains manual aliasing through the following topics.

- ”Manual Aliasing and Multi-Site” on page 597
- ”Enabling/Disabling Manual Aliasing” on page 598
- ”Assigning a Manual URL Alias to Content” on page 598
  - ”Adding a Manual Alias via the Page Name Maintenance Screen” on page 599
  - ”Adding a Manual Alias via the Alias Tab” on page 604
- ”Editing a Manual URL Alias” on page 605
- ”Removing a Manual Alias” on page 606

Manual Aliasing and Multi-Site

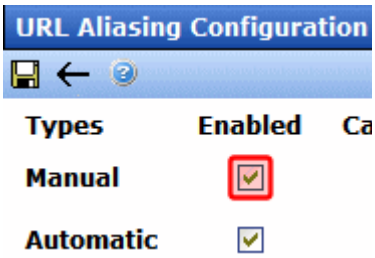
If your **Ektron CMS400.NET** deployment uses multi-site, the following restrictions apply to manual aliasing.

- Any manual alias applied to the root site cannot be applied to any of the additional sites
- Any manual alias applied to an additional site cannot be applied to the root site

However, the same manual alias can be applied to any number of additional sites.

Enabling/Disabling Manual Aliasing

To activate manual aliasing, follow this path to the URL Aliasing Configuration screen: **Settings > Configuration > URL Aliasing > Settings**.

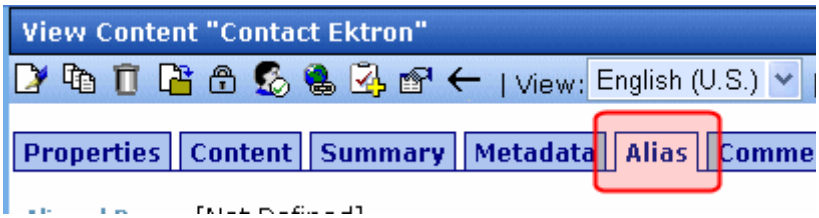


The screen indicates if manual aliasing is currently on or off. To change its state, click the Edit button (), check or uncheck the box, and click the Save button.

Assigning a Manual URL Alias to Content

Two screens let you manually alias content.

Screen/tab	Who is authorized to use	Can create/update these manual aliases	For more information, see
Page Name Maintenance	members of Administrators group	an unlimited number of primary and secondary	”Adding a Manual Alias via the Page Name Maintenance Screen” on page 599
Alias tab of View Content screen (see image below)	• members of Administrators group • users assigned Alias-Edit role	primary (Alias tab displays but does not let users change secondary aliases)	”Adding a Manual Alias via the Alias Tab” on page 604



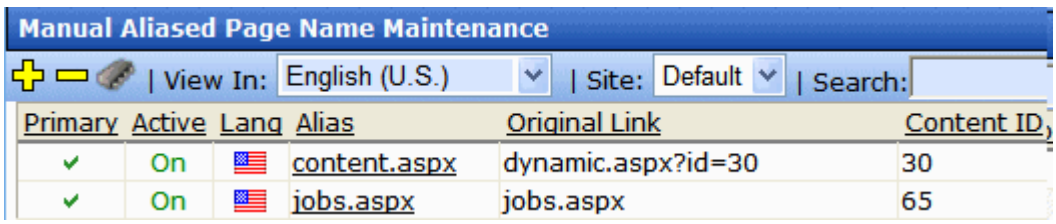
Adding a Manual Alias via the Page Name Maintenance Screen

Prerequisites

- Manual aliasing is enabled. *See Also:* "Enabling/Disabling Manual Aliasing" on page 598
- You are a member of the Administrators group

To add a manual alias via the Page Name Maintenance screen, follow these steps.

1. Go to **Workarea > Settings > Configuration > URL Aliasing > Manual**.
2. The Manual Aliased Page Name Maintenance screen appears.



The following table explains the buttons on the screen.

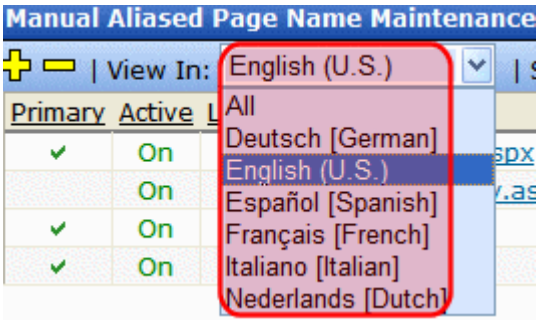
Button	Description	For more information, see
	Add manual alias	"If creating new alias" on page 602

Button	Description	For more information, see
	Delete manual alias	"Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen" on page 608
	Manually clear cache	"Manually Clearing the Cache" on page 585

The following table explains the fields on the screen.

Field	Description
Primary	If you assign more than one manual alias to content, this field designates the primary one. If you only assign one, it is the primary by default. The primary alias appears in the browser when a user hovers the cursor over a link to associated content, such as within a List Summary or a Collection. It also appears in the browser address field after the content is selected. See "Example of an Alias in the Browser" on page 572. If a user views a content block's **Alias** tab, he can only see and edit the primary manual alias. *See Also:* "Adding a Manual Alias via the Alias Tab" on page 604
Active	Indicates if this alias is active.
Lang	The alias's language flag.
Alias	The alias (that is, the page name) that site visitors can enter as part of the URL into a browser to see the associated content.
Original Link	The content template and variable being aliased.
Content ID	The ID number of the content assigned to the alias.

3. To edit an existing manual alias, use the language selector dropdown (see image below) to choose the language of the aliases you want to work with.

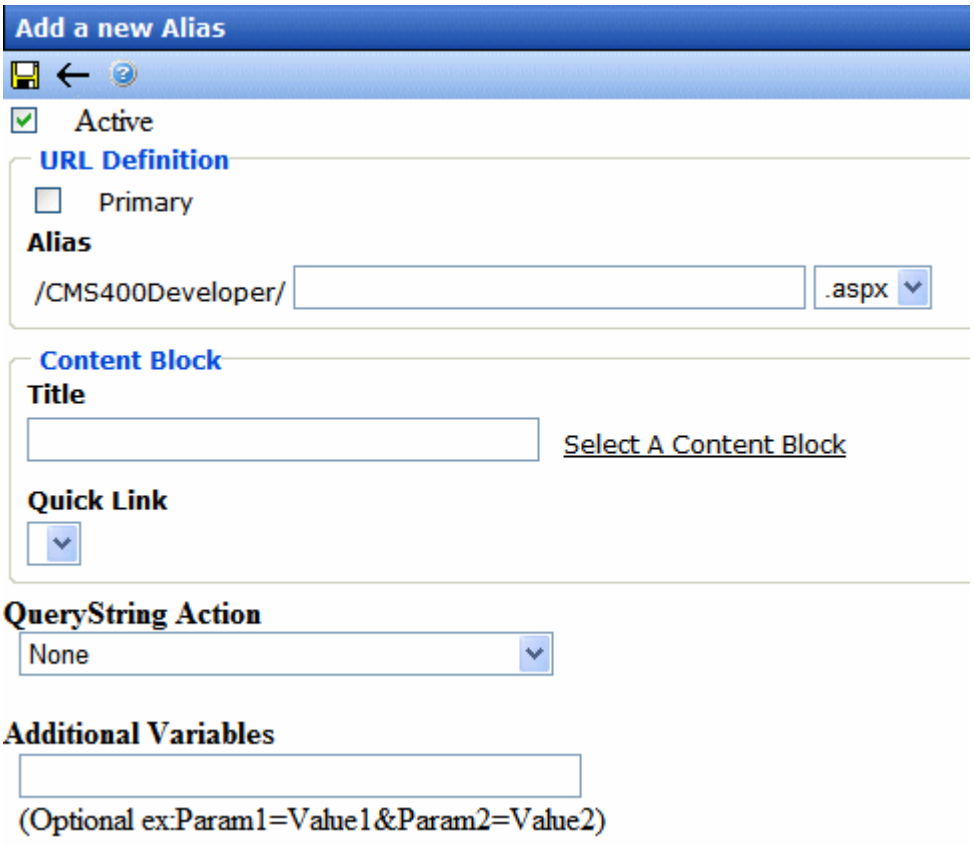


If you are creating a new alias, click the Add Alias button ( ) and skip to Step 8.

4. If your **Ektron CMS400.NET** version supports multi-site configurations, use the **Site** dropdown to choose the site.
5. Click the alias you want to edit.

NOTE If there are many aliases, use the search to help find one. You can filter aliases by alias name, Content ID, etc.

6. The View Alias screen appears. Click the Edit button ( ).
7. The Add/Edit Manual Alias screen appears.



8. **If editing existing alias**

   If this is *not* the primary alias, you can check or uncheck the **Active** checkbox. Only active aliases can be entered into the browser address field to display the assigned content.

   If this *is* the primary alias, you cannot uncheck it. If you want to inactivate a primary alias, first assign another alias to be the primary for this content block. Then, return to this screen and make this alias inactive. Alternatively, you can delete a primary alias.

   If creating new alias

   Check the **Active** checkbox if you want this alias to be active.

9. Check the **Primary** box if you want this to be the primary alias.
   See Also: "Primary" on page 600

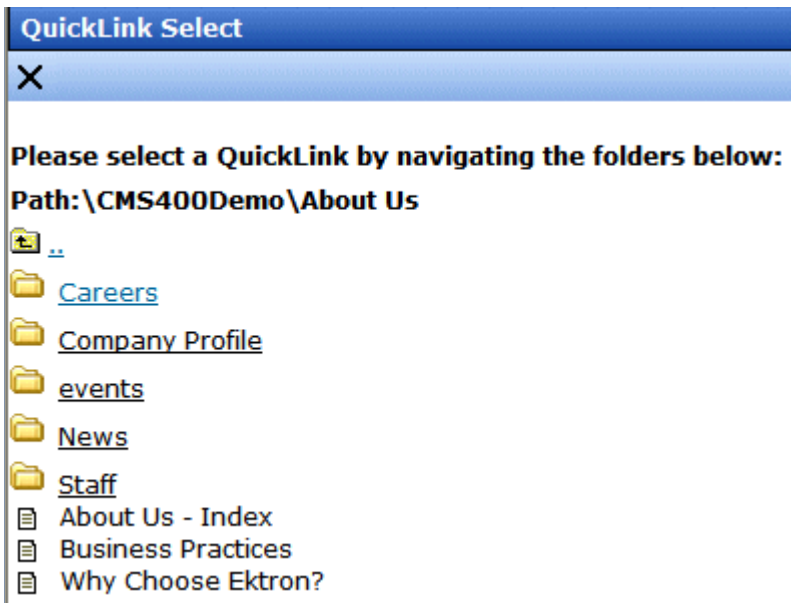
   If another alias is the primary when you check this box, the other alias is no longer the primary.

10. In the **Alias** field, enter the alias name. It cannot include the following characters: (comma), (space), \, <, >, “, :, |. Also, it must be unique within this site and language.

    To the right of **Alias Name** is a pull-down of valid extensions. Select one to apply to this alias. Extensions are defined on the URL Aliasing Configuration screen. *See Also:* ”Extension” on page 578

11. Click **Select a Content Block** to choose content. The QuickLink Select window appears.

NOTE Only content in the language chosen on the Page Name Maintenance screen appears.



12. Navigate through the folder structure and click the content to which you are assigning the alias.

TIP! A folder’s content appears below its subfolder list. You may have to scroll down to see the content.

13. The **Title**, **Link** and **Quick Link** fields fill in, using information from the selected content.

    If the content has more than one quicklink assigned to it, select the one to which you are assigning the alias.

14. To learn about the QueryString Action field, go to "Query String Action" on page 580.
15. Enter the **Additional Variables**. These are used as query string parameters that can track how visitors arrived at the aliased page. You might use these for marketing campaigns, to analyze the source of an aliased page's visitors.

    For example, the **Additional Variables** field has `?gclid=CO7gs_L0_ZICFRkTIgodBgV9CQ`. Your Web site's analytics software can track the source of the query through the variable.

TECHNICAL NOTE Within the page load event that returns the query string parameters, use the `Request.RawURL()` property instead of `request.querystring`.

16. Click the Save button ( ).

Adding a Manual Alias via the Alias Tab

Once manual aliasing is enabled, every content block includes an **Alias** tab. You can use that tab to view and update the content's primary alias.

NOTE If you insert/update an alias via the **Alias** tab, it only goes live after the content is published.

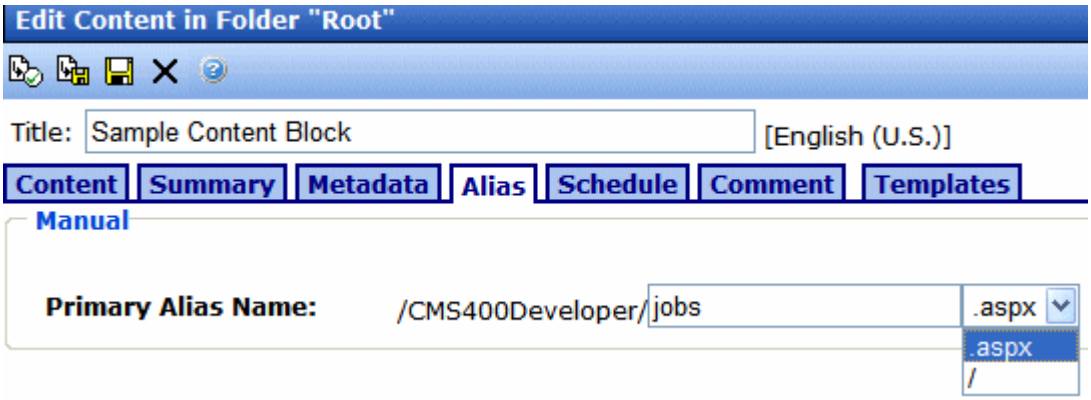
See Also: "Manual Aliasing" on page 597

Prerequisites

- Manual aliasing is enabled. *See Also:* "Enabling/Disabling Manual Aliasing" on page 598
- You are a member of the Administrators group or assigned to the Alias-edit Role. If neither, you do not see the **Alias** tab.

To add a manual URL alias via the Alias tab, follow these steps.

1. In the Workarea, select **Content**.
2. Navigate to and click the content you want to work with.
3. Click the Edit button ( ).The Edit Content screen appears.



4. Click the **Alias** tab.
5. In the **Primary Alias Name** field, enter the name of the primary alias.

   The name cannot include the following characters: (comma), (space), \, <, >, “, :, |. Also, it must be unique within this site and language.
6. To the right of **Primary Alias Name** is a pull-down of valid extensions. Select one to apply to this manual alias.

   The extensions are set up in the URL Aliasing Configuration screen’s **Extension** field. *See Also:* ”Extension” on page 578
7. Save and publish the content.

Editing a Manual URL Alias

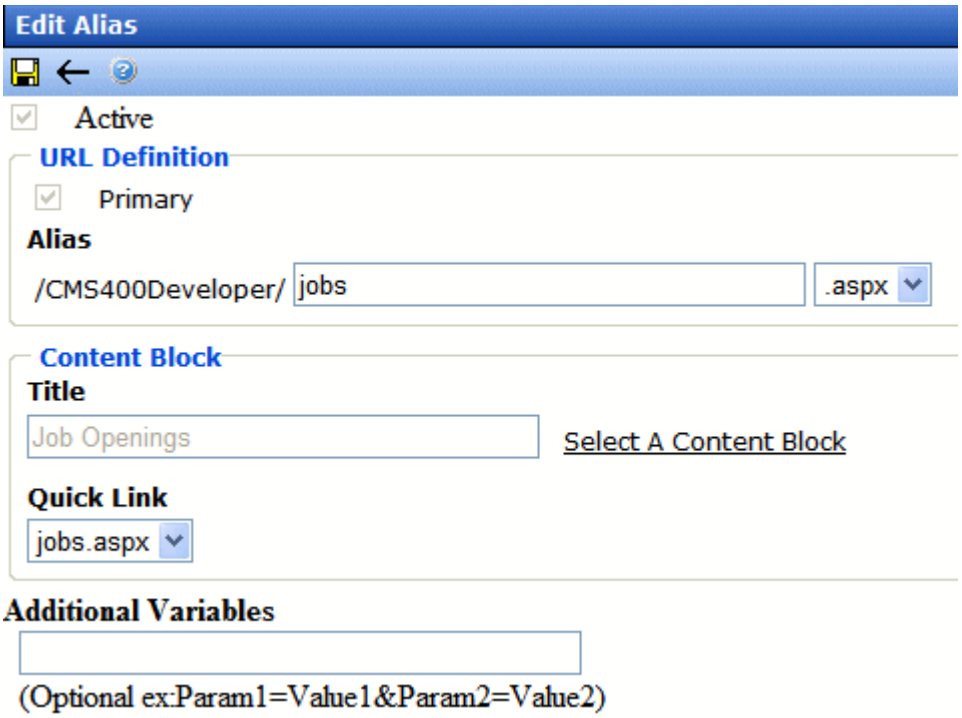
You can edit any manual alias via the Edit Alias screen. This lets you change all fields completed when the alias was created: name, assigned content, etc.

NOTE You can also edit a content block’s primary alias name via the **Alias** tab on the content screen. See ”Adding a Manual Alias via the Alias Tab” on page 604.

To edit a manual URL alias, follow these steps.

1. Go to **Workarea > Settings > Configuration > URL Aliasing > Manual**.
2. On Manual Aliased Page Name Maintenance screen, click the alias you want to edit.
3. The View Alias screen appears. Click the Edit button ( ).

4. The Edit Alias screen appears.



5. Make any changes. To learn about the fields, see "If editing existing alias" on page 602.

   If this is the only alias assigned to the content, you cannot uncheck **Primary** or **Active**.

   If other aliases are assigned to the content, and you want to make one of them the primary, edit that alias and check the **Primary** checkbox. You cannot uncheck **Primary** from this screen.

   Also, only secondary aliases can be inactivated by unchecking the **Active** checkbox.

6. Click the Save button ( ).

Removing a Manual Alias

Just as there are two ways to add a manual alias, there are two ways to remove one.

- ”Removing a Manual Alias via the Content Alias Tab” on page 607
- ”Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen” on page 608

Removing a Manual Alias via the Content Alias Tab

Using a content block’s **Alias** tab, you can delete a primary manual alias only if no secondary aliases exist. If secondary aliases exist and you want to delete or replace the primary alias, you must use the Manual Aliased Page Name Maintenance screen. *See Also:* ”Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen” on page 608

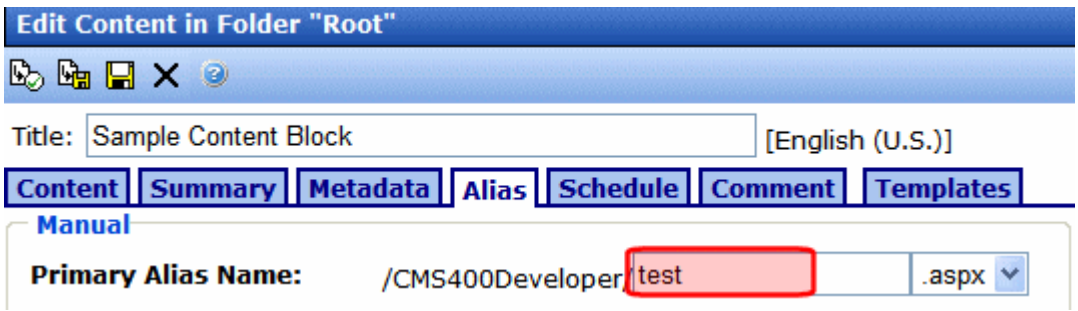
You can neither see nor delete secondary manual aliases from the **Alias** tab.

Note

If you delete an alias via the **Alias** tab, the change only goes live after the content is published.

To remove the primary manual alias by editing the associated content block, follow these steps.

1. Browse to the content block associated with the alias.
2. Click **Edit**.
3. Click the **Alias** tab.
4. Delete or replace the value in the **Primary Alias Name** field.



5. Click **Save**, **Check in**, or **Publish**.

Removing a Manual Alias via the Manual Aliased Page Name Maintenance Screen

Using the Page Name Maintenance Screen, you can delete the primary and any secondary manual aliases.

IMPORTANT! If you want to delete a primary manual alias while secondary aliases exist, you must first designate one of the secondary aliases as the primary. You can only delete the primary alias if no secondary aliases exist.

To remove a manual alias via the Page Name Maintenance Screen, follow these steps.

1. Go to **Workarea > Settings > Configuration > URL Aliasing > Manual**.
2. On Manual Aliased Page Name Maintenance screen, click the Remove button ( ).
3. Check the box next to all aliases you want to remove.
4. Click the Delete button ( ).
5. Click **OK** to confirm.

Using RegEx Expressions

RegEx expressions allow site visitors to enter a human-readable URL into the browser address field and transform that entry into the query string component of an **Ektron CMS400.NET** page. The benefit is that the site visitor can “guess” other pages based on an easily recognizable pattern.

For example, a RegEx expression aliases `blogs.aspx?blogmonth=3&blogyear=2006&blogid=41` as `blogs/2006/03/41`. From that, a site visitor can infer that he can enter `blogs/2006/03/40` to see the previous post, enter `blogs/2006/03` to see all March 2006 posts, etc.

This section provides a description of the screen’s fields, then a step-by-step explanation of how to create and validate a RegEx expression.

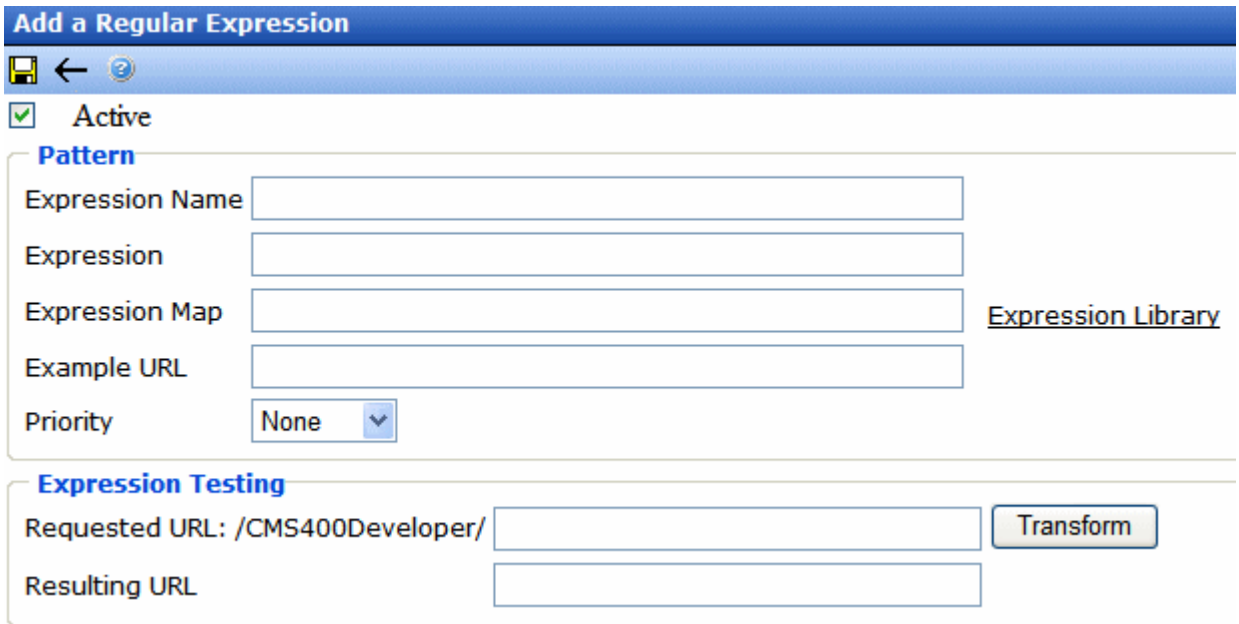
See Also:

- ”Add a Regular Expression Screen” on page 609
- ”Instructions for Creating a RegEx Expression” on page 611

Add a Regular Expression Screen

To access the Regular Expression screen, follow these steps.

1. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > URL Aliasing > RegEx**.
2. Click the Add button ( ).
3. The Add a Regular Expression screen appears.



4. Use the following table to complete the screen.

Field	Description	For more information, see
Active	Check this box to activate the expression. If the expression is active, site visitors can enter an aliased URL to access a page on your site. For example, they can enter `www.example/com/blogs/2006/03/41` to access a blog page even though the actual URL is `www.example/com/blogs/blogs.aspx?blogmonth=3&blogyear=2006&blogid=41`	
Expression Name	Assign an easily recognizable name to this regular expression. It appears on the RegEx Aliased Page Name Maintenance screen to help users identify it.	
Expression	Enter a RegEx expression that will replace the variables (for example, `$1`, `$2`, etc.) in the Expression map. If you want to insert a question mark into the Expression, you must precede it with a backslash (\).	• "Instructions for Creating a RegEx Expression" on page 611 • http://regexlib.com/
Expression Map	Enter a map of original URL elements. The map lets you replace query string parameters with variables, such as `$1`, `$2`, etc. As a result, a site visitor can identify any page that uses this pattern by changing the variable values. You can click **Expression Library** to view examples of RegEx expression maps. To copy any map that resembles your page pattern, click it. You can then modify is as necessary.	"Instructions for Creating a RegEx Expression" on page 611
Example URL	Displays an example of Web page that follows this pattern.	

Field	Description	For more information, see
Priority	Assign a priority to this expression from the following choices. • high • medium • low • none Assign **high** to expressions that will be used most frequently. This field helps the aliasing feature respond quickly when site visitors enter expressions into the browser address field. This is because aliasing first tries to match a site visitor's entry with high priority expressions, then medium, then low.	
Requested URL	Enter a user-friendly pattern that site visitors can insert to access pages on your site. This pattern replaces the query string component of a URL. For example, `blogs/2006/03/41`.	"Instructions for Creating a RegEx Expression" on page 611
Transform button	After completing all fields on the screen except **Resulting URL**, use this button to check the validity of the **Expression**, **Expression Map** and **Requested URL** fields.	
Resulting URL	Values appear in this field after you click the **Transform** button. It uses the **Expression** and **Expression Map** field values to translate a Requested URL (one a site visitor will enter) into a Resulting URL (the page's actual query string parameter).	

Instructions for Creating a RegEx Expression

Use the following steps as a guide to creating a Regex expression.

1. Find a site page (such as a blog) whose query string parameters allow users to guess similar pages using a pattern. For example

```
http://ecmintranet/blogs.aspx?blogmonth=3&blogyear=2006
```

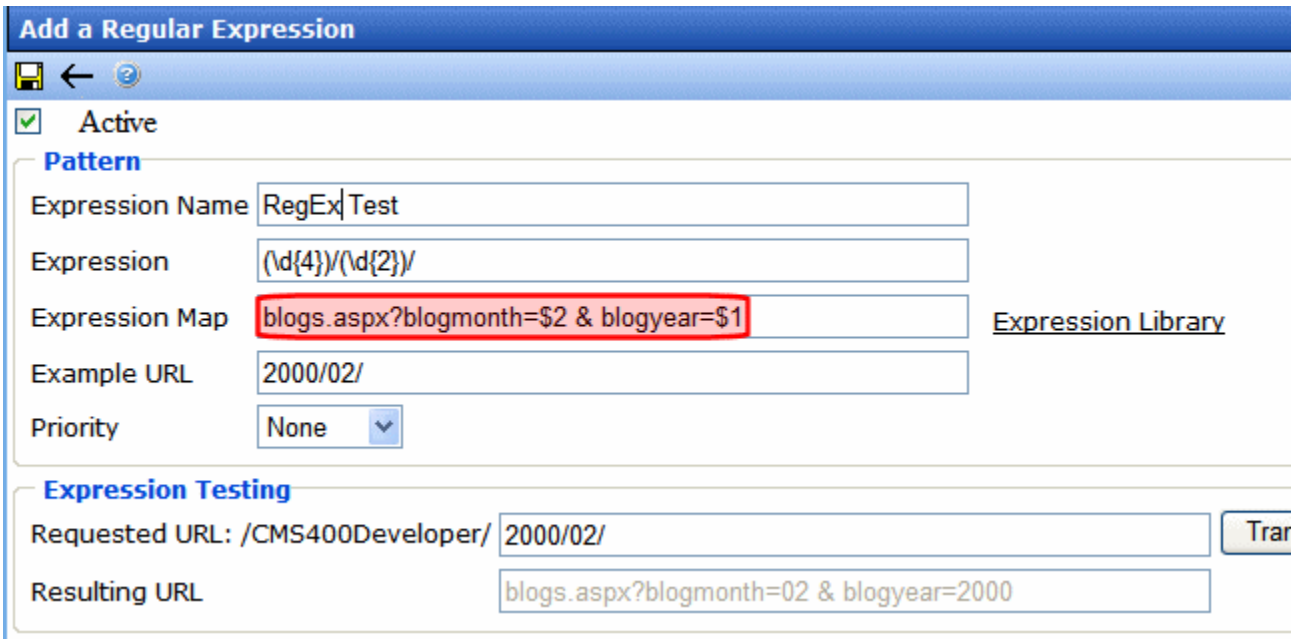
2. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Url Aliasing > RegEx**.
3. Click the Add a Regular Expression button ( ).

4. Give your expression a name.
5. Click **Expression Library**.
6. Find and click an Expression Map similar to the page you found in Step 1. To continue our example, choose

```
PageName.aspx?year=$1 & month=$2
```

7. The **Expression** and **Example URL** field values fill in, using information from the Expression Map.
8. As needed, adjust the values in the Expression map or the RegEx expression to match your page name. For example, change **PageName** to **blogs**, and delete **Default.aspx**

   See Also: http://regexlib.com/
9. To continue the example, change the Expression Map field so that it looks like this.



10. Click the **Transform** button to verify that the resulting URL matches the original page pattern. If it does not, check all steps, especially the **Expression** field.

Site Aliasing

If your site supports the multi-site feature (see "Multi-Site Support" on page 1006), you can enter aliases for any site. For example, your company's name just changed from Bionics to NewGen. You can use the site aliasing feature to resolve the url `www.bionics.com` to `www.newgen.com`.

NOTE If your Ektron CMS400.NET supports multi-site configurations, an automatic alias assigned to a taxonomy will apply to content in all sites. This is because taxonomy is site independent.

IMPORTANT! If the site being aliased resides in a folder under your server's Web root folder (for example, ser4325/min), you must add the subfolder to the alias. So, to continue the above example, you could not enter `http://www. myalias.com` as an alias for that site. Instead, you would enter `http://www.myalias.com/min/`.

See Also:

- "Creating Site Aliases" on page 613
- "Editing a Site Alias" on page 616
- "Deleting a Site Alias" on page 616

Creating Site Aliases

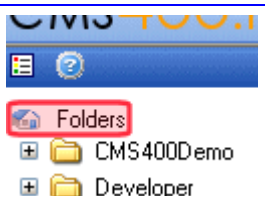
Enabling site aliasing has two steps.

- "Setting up a Site Alias in the Ektron CMS400.NET Workarea" on page 613
- Add each site alias as an IIS host. To learn how do this for your server, please consult IIS help.

Setting up a Site Alias in the Ektron CMS400.NET Workarea

To set up site aliases, follow these steps.

NOTE You cannot assign a site alias to the site root folder.

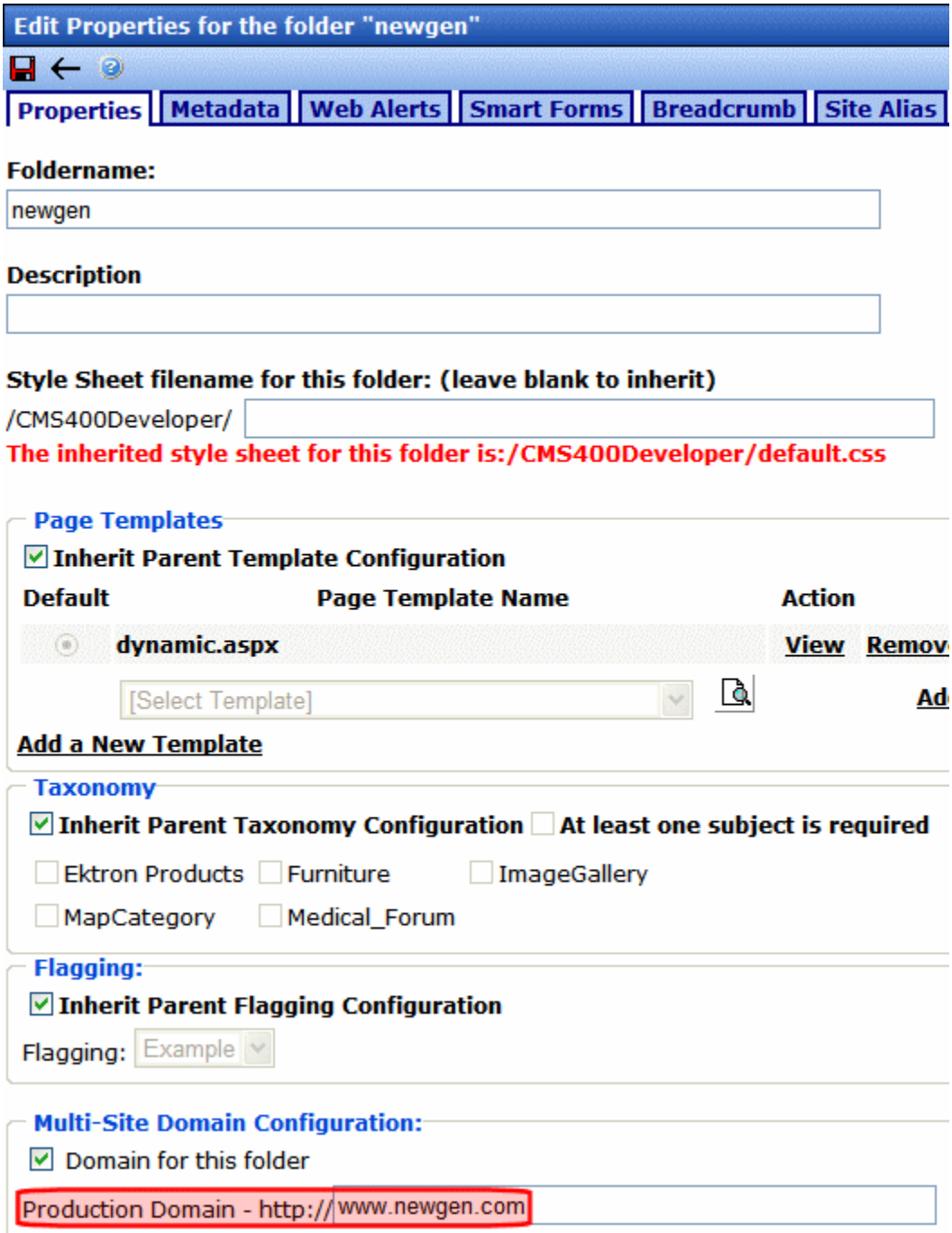


1. Open the site folder for which you want to create aliases. (Site folders have a globe icon, like this: newgen).
2. Click **View > Folder Properties**.
3. Click the Edit button ( ).
4. Click the **Site Alias** tab.

5. Enter the alias into the **Alias Name** field.

NOTE The alias cannot end with a slash (/).

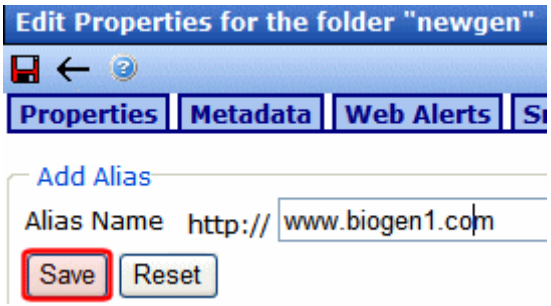
From now on, if a site visitor enters the alias into a browser address field, he is redirected to the site URL (set on the folder properties tab's **Production Domain** field).


Edit Properties for the folder "newgen"
Properties
Metadata
Web Alerts
Smart Forms
Breadcrumb
Site Alias
Foldername:
newgen
Description
Style Sheet filename for this folder: (leave blank to inherit)
/CMS400Developer/
The inherited style sheet for this folder is:/CMS400Developer/default.css
Page Templates
Inherit Parent Template Configuration
Default
Page Template Name
Action
dynamic.aspx
View
Remov
[Select Template]
Add a New Template
Taxonomy
Inherit Parent Taxonomy Configuration
At least one subject is required
Ektron Products
Furniture
ImageGallery
MapCategory
Medical_Forum
Flagging:
Inherit Parent Flagging Configuration
Flagging:
Example
Multi-Site Domain Configuration:
Domain for this folder
Production Domain - http://
www.newgen.com

Editing a Site Alias

Follow these steps to edit a site alias.

1. Open the site folder for which you want to create aliases. (Site folders have a globe icon, like this: newgen).
2. Click **View > Folder Properties**.
3. Click the Edit button ( ).
4. Click the **Site Alias** tab.
5. From the Alias list, click the alias that you want to edit. When you do, it is highlighted in yellow and appears in the **Alias Name** field.
6. Change the alias text.
7. Click the **Save** button directly below the **Alias Name** field.



8. Click the screen's Save button ( ).

Deleting a Site Alias

Follow these steps to delete a site alias.

1. Open the site folder for which you want to create aliases. (Site folders have a globe icon, like this: newgen).
2. Click **View > Folder Properties**.
3. Click the Edit button ( ).
4. Click the **Site Alias** tab.
5. From the Alias list, click the alias that you want to delete. When you do, it is highlighted in yellow and appears in the **Alias Name** field.

6. Click the delete icon ( ).
7. The alias is deleted.

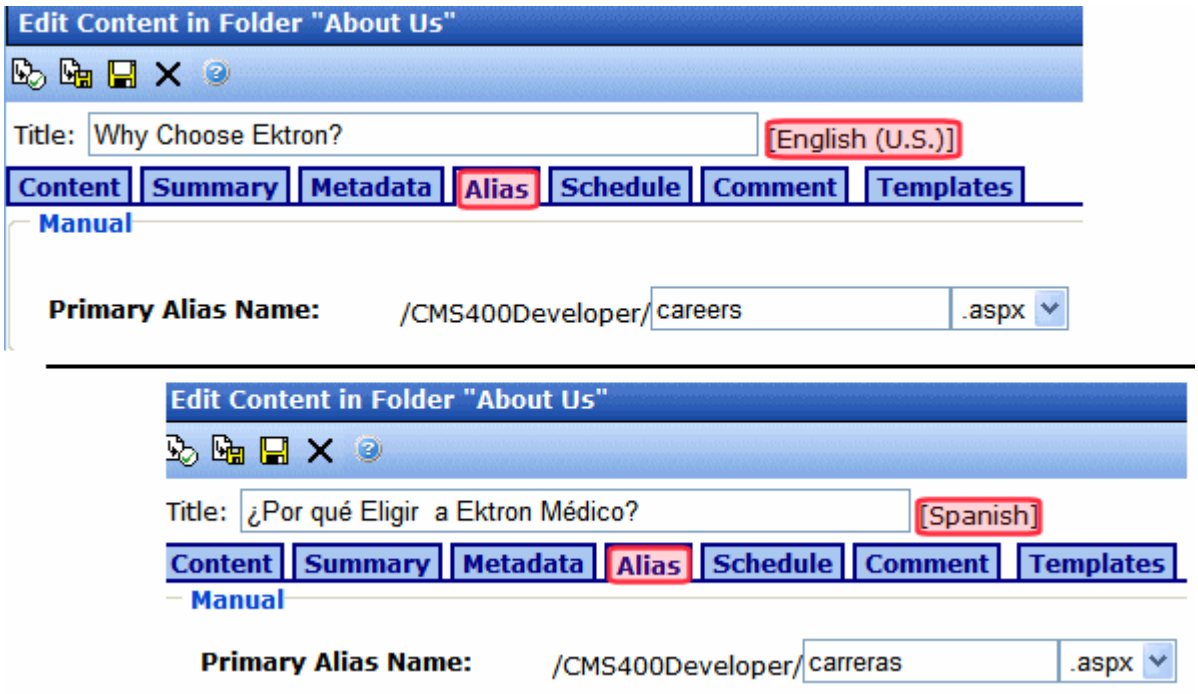
Upgrading from Previous Releases

See the following **Ektron CMS400.NET** Knowledge Base article to learn about 7.6 URL Aliasing upgrade issues: http://dev.ektron.com/kb_article.aspx?id=21358

Assigning an Alias to Multi-Language Content

If **Ektron CMS400.NET** has several foreign-language versions of content that share an ID, you can alias only one of them and check the URL Aliasing Configuration screen's **Disable Language Awareness** checkbox. Then, when a site visitor selects a language in which to view your site and enters the alias, **Ektron CMS400.NET** displays the aliased content in the selected language.

If you prefer, you can assign a different alias to each language version of content. To do this, select the content, language, go to the **Alias** tab, and assign a language-specific alias. For example, your English Careers page's alias is **careers**, while your Spanish alias is **carreras**, and your German alias is **Karrieren**.



Also, alias names must only be unique within a language. So, for example, you cannot have two aliases named `Ektron` within U.S. English content. But, you can create two aliases named `Ektron` if one is applied to U.S. English content, and the other applies to Spanish content.

Using Classic ASP with Windows 2008 Server 64 Bit

If you want to use aliasing on a 64-bit server running Windows 2008, follow these steps.

1. Install classic ASP onto the server. It is not installed by default. *See Also:* http://technet.microsoft.com/en-us/library/cc753918.aspx
2. Open your *`site root`*`/web.config` file.
3. Go to the `<handlers>` section.
4. Find this tag:

```
<add name="ek*" path="*" verb="GET,HEAD,POST"
type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory" modules="ManagedPipelineHandler"
scriptProcessor="" resourceType="Unspecified" requireAccess="Script" preCondition="" />
```

5. Add the following ASP handler above the `ek` handler shown above.

```
<add name="ASPClassic" path="*.asp" verb="GET,HEAD,POST" modules="IsapiModule"
scriptProcessor="%windir%\system32\inetsrv\asp.dll" resourceType="File" />
```

Business Rules

Business Rules allow you to define conditions for Web pages on your site. You choose an action based on whether the conditions are true or false when a site visitor browses your site. For example:

- **Condition** - a site visitor visits your site for the first time
- **Action** - add a cookie to the site visitor's system and pop up a welcome message

With Business Rules, you do not write code to set conditions and initiate actions. You simply complete the information requested in the Business Rules wizard, have your developer add a Business Rules server control to your Web form, and assign the server control the Business Rules Ruleset.

NOTE For Information on the Business Rules server control, see the Developer Manual Section "Introduction to Server Controls" > "Business Rules Server Control".

Business Rules start out with a Ruleset that is assigned an ID. Each Ruleset is made up of one or more rules. Rules are made up of conditions and actions. There are several predefined conditions and actions for rules in CMS400.NET.

Conditions include:

- Cookie Parameter = value
- Form Parameter = value
- QueryString Parameter = value
- Server Variable = value
- Custom Parameter = value

Actions include:

- Displaying a calendar
- Displaying a message
- Opening a URL in a new window

- Popping up a message
- Redirecting to a new URL
- Setting a cookie value
- Displaying a content block.

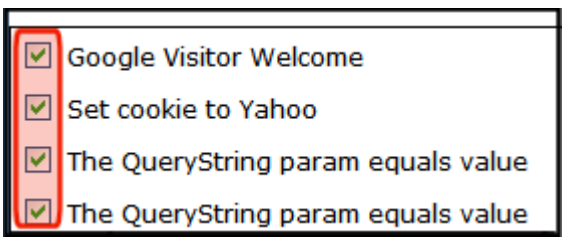
Once a rule is defined, you can add it to multiple Rulesets. This is useful if you have several groups of rules that use a common rule.

Business Rules are more fully explained through the following topics.

- ”Selecting a Rule” on page 621
- ”Creating a New Business Rule Ruleset” on page 622
- ”Working with Rulesets” on page 623
- ”Permission to Work with Business Rules” on page 633

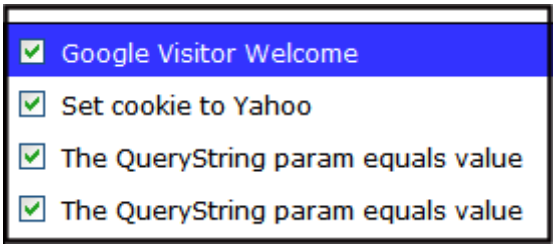
Selecting a Rule

There are two ways to select a rule. The first, check boxes, allows you to select a rule by clicking the check box. This method is used when turning a rule on or off in the Ruleset. Checked, the rule is active. Unchecked the rule is inactive.



The second, highlighting a rule, is used to when you want to work with the rule. For example, you want to add or remove a rule from a

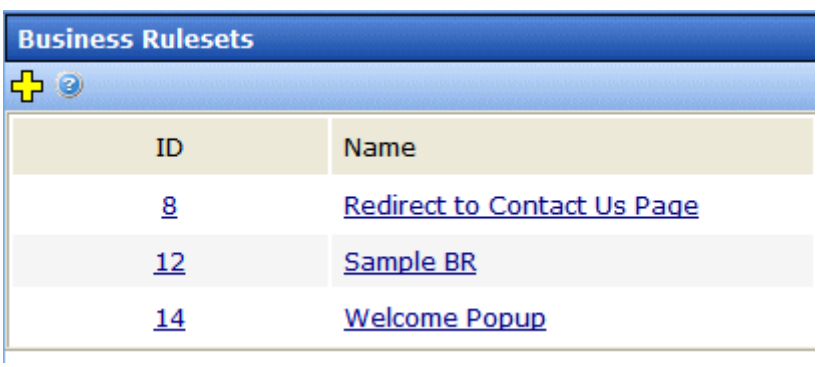
Ruleset. To highlight a rule, click its title. Once a rule is highlighted, it is ready for an action, such as Remove or Edit.



Creating a New Business Rule Ruleset

NOTE Only members of the Administrators group or those defined in Manage Members for Role: Rule Editor screen can create or edit Business Rules and Rulesets. *See Also:* "Defining Roles" on page 795

You create Business Rules Rulesets from the Business Ruleset screen in the Workarea.



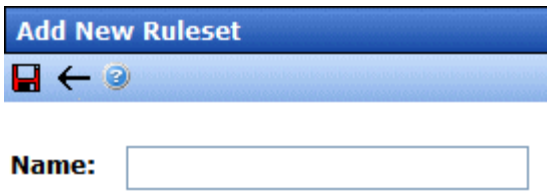
The Business Ruleset screen contains these columns:

- **ID** - the numerical ID assigned to the Ruleset.
- **Name** - a unique name you give to the Ruleset to help you understand what the Ruleset does.

To add a new Ruleset, follow these steps:

1. In the Workarea, click **Modules** > **Business Rules**.

2. Click the Add New Ruleset button ( ).
3. The **Add New Ruleset** screen appears.

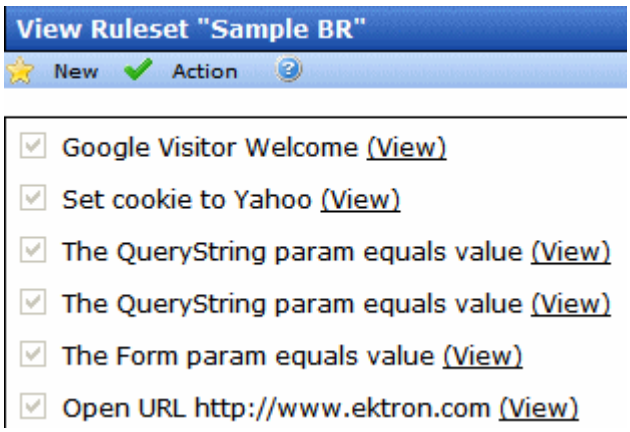


4. In the **Name:** text box, add a name for the rule.
5. Click the Save button ( ).
6. The View Ruleset screen appears.

At this point, you can continue on to "Add a New Rule to a Ruleset" on page 626 or "Add an Existing Rule to a Ruleset" on page 630 to add a rule or click the Back button ( ) and return to add a rule later.

Working with Rulesets

After creating a Ruleset, you typically add rules to it via the View Ruleset screen.


View Ruleset "Sample BR"
New
Action
Google Visitor Welcome (View)
Set cookie to Yahoo (View)
The QueryString param equals value (View)
The QueryString param equals value (View)
The Form param equals value (View)
Open URL http://www.ektron.com (View)

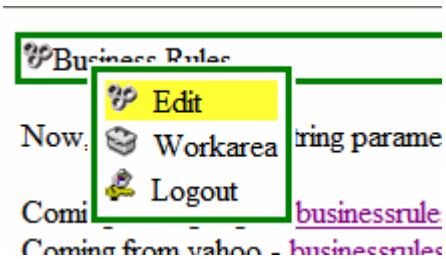
The View Ruleset screen is the launch pad for working with existing Rulesets. From this screen you can:

- "Edit a Ruleset" on page 624
- "Remove a Rule From a Ruleset" on page 625

- "Change the Order of Rules in the Ruleset" on page 625
- "Delete a Ruleset" on page 626
- "Add a New Rule to a Ruleset" on page 626
- "Add an Existing Rule to a Ruleset" on page 630
- "Edit a Rule in a Ruleset" on page 632
- "Viewing a Rule in a Ruleset" on page 632

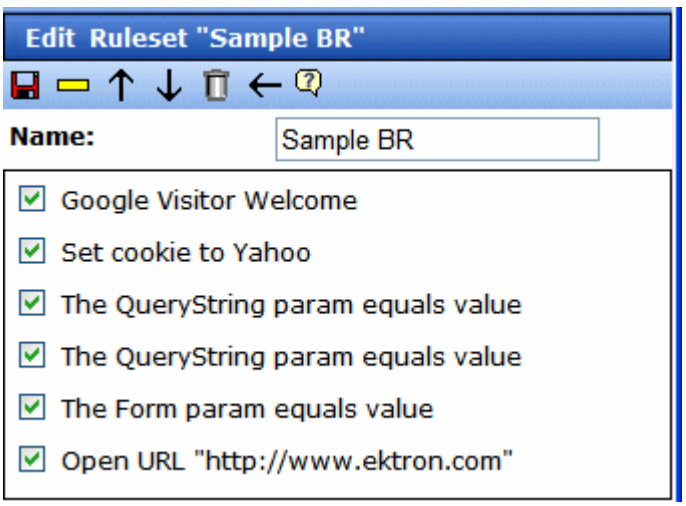
Edit a Ruleset

You can initiate editing a Ruleset from two different locations, the Web page or the Workarea. To edit a Ruleset from the Web page, navigate to a Business Rule on a Web page while logged in. Then, right click the Business Rule icon and click **Edit**.



If editing from the Workarea, click **Modules** > **Business Rules** and then click the Ruleset to edit. Next, click **Action > Edit Ruleset**.

The Edit Ruleset screen appears.



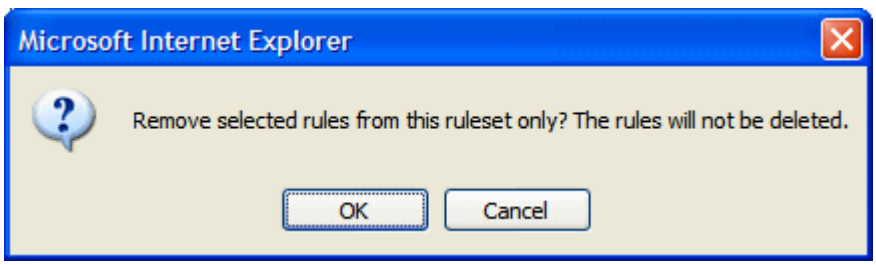
Remove a Rule From a Ruleset

Follow these steps to remove a rule from the Ruleset.

1. Navigate to the Edit Ruleset screen, as explained in "Edit a Ruleset" on page 624.
2. Highlight the rule you want to remove.

WARNING! The check box associated with the rule must be empty for you to remove the rule. If the check box is not empty, the rule will look as though it has been removed

3. Click the Remove Rule button ( ).
4. A pop up appears letting you know that the rule will be removed from this Ruleset only.



5. Click **OK**.
6. The rule is removed from the Edit Ruleset screen.
7. Click the Save button ( ).

Change the Order of Rules in the Ruleset

The order of rules in a Ruleset affects how rules are applied when a site visitor views a page. For example, you want to display a welcome message before a content item. To accomplish this, move the rule for the welcome message above the rule for a content item.

Follow these steps to change the order of the rules in a Ruleset.

1. Navigate to the **Edit Ruleset** screen, as explained in "Edit a Ruleset" on page 624.

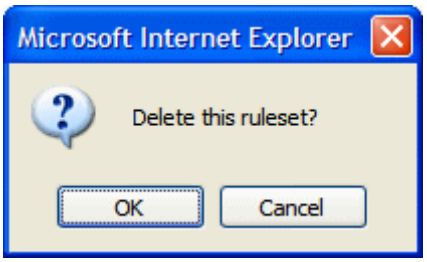
2. Highlight the rule you want to reorder.
3. Click the Move Up or Move Down buttons ( ) ( ) to move the rule up or down the list.
4. Click the Save button ( ).

Delete a Ruleset

When you delete a Ruleset, it is removed from the system permanently. However, rules included in a Ruleset are not deleted. This is because a rule can be used in multiple Rulesets.

Follow these steps to delete a Ruleset.

1. Navigate to the **Edit Ruleset** screen, as explained in "Edit a Ruleset" on page 624.
2. Click the Delete Ruleset button ( ).
3. A dialog asks you to confirm the deletion.



4. Click **OK**.

Add a New Rule to a Ruleset

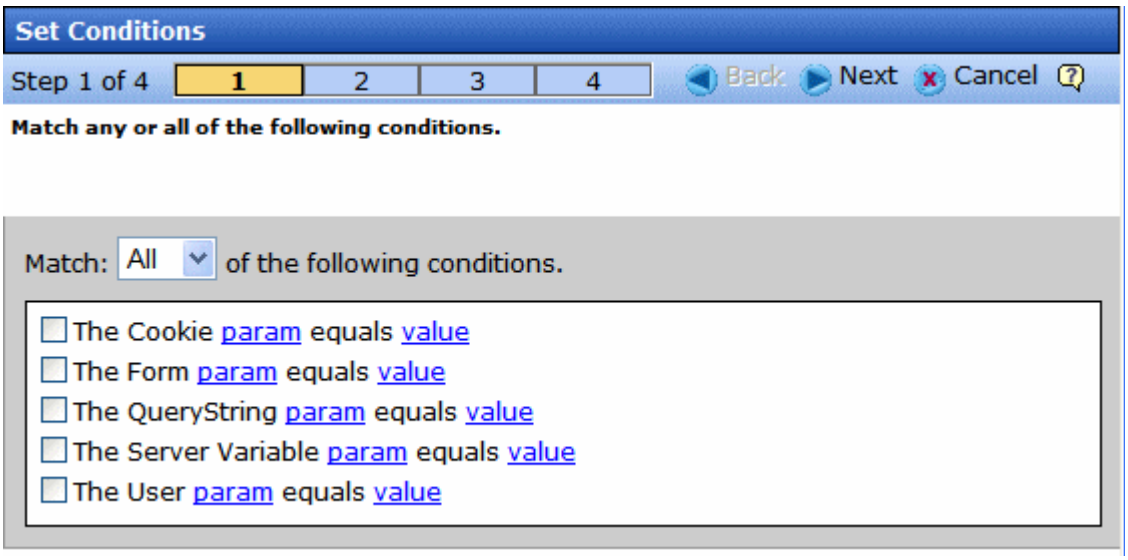
Adding a new rule is easy with Ektron CMS400.NET. Just click the **Add** button on the View Ruleset screen. The Rules Wizard launches and helps you define a rule.

Follow these steps to add a new rule to your Ruleset.

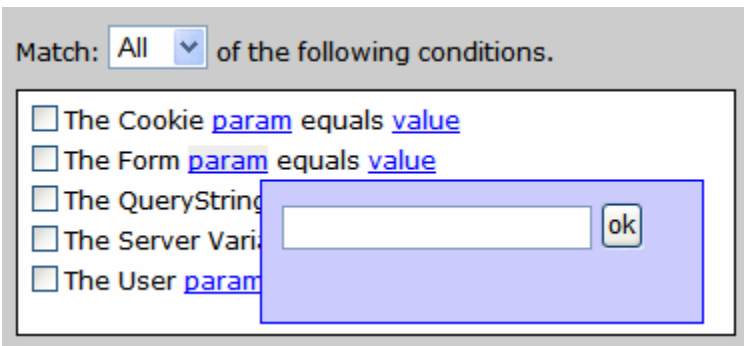
1. If you arrived here from the "Creating a New Business Rule Ruleset" on page 622 section, continue to the next step.

   Otherwise, navigate to the Business Rules screen in the Workarea by clicking **Modules** > **Business Rules**. Next, click the Business Rule for which you want to create a new rule.

2. Click **New > Add New**.
3. The Rules Wizard launches.



4. Step 1 prompts you to create conditions for the rule and decide whether a site visitor needs to match Any or All conditions. Clicking the param and value links opens a dialog to enter information.



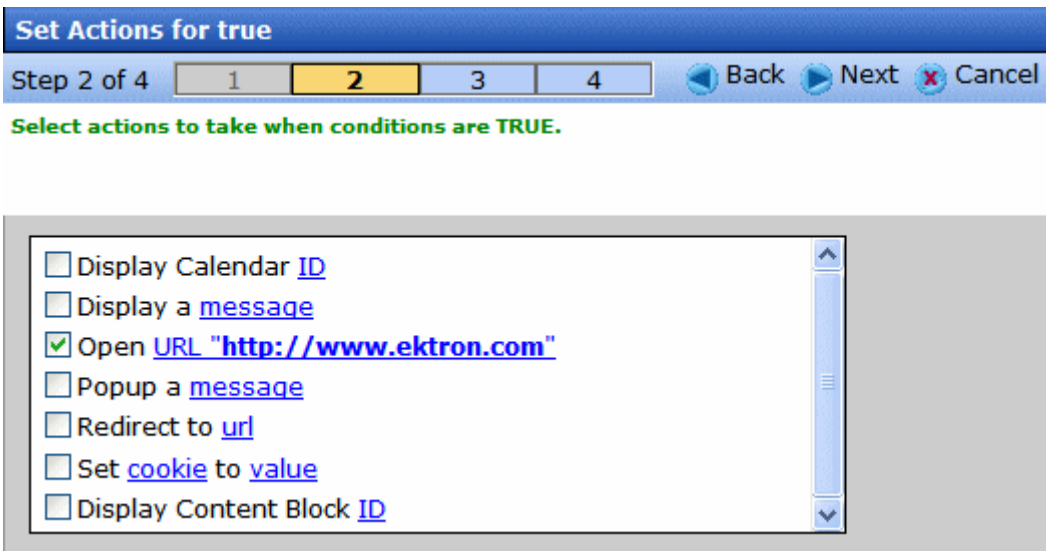
Place a check next to any condition you want to use. Use the table below to help you fill out the param and value fields.

Conditions Table

Condition	Description	Example
The Cookie param equals value	Use a cookie for this condition. **param** - enter **Name** in this field. **value** - enter the name of the cookie in this field.	Does the site visitor's system have an Ektron cookie? **Usage**: The Cookie param “Name” equals value “Ektron”
The Form param equals value	Use a form elements field name and match the value entered into the element. **param** - enter a form’s element Field Name from a form. **value** - enter the value you want the form element to match.	A form has a Choices Field element with the Field Name “Favorite_Food” and choices of Pizza, Steak and Chicken. When a site visitor chooses Pizza and clicks submit, your rule launches a Pizza company’s Web site. **Usage**: The Form param “Favorite_Food” equals value “Pizza”
The QueryString param equals value	Use the QueryString for this condition **param** - the name of the QueryString. For example, ID. **value** - the value associated with the parameter. For example, 18.	Is content with the ID of 18 being displayed? **Usage**: The QueryString param “ID” equals value “18”
The Server Variable param equals value	Use server variables from the site visitor. **param** - enter the name of a server variable. For example, HTTPS. **value** - the value associated with the parameter. For example, On.	Is the site visitor’s browser using SSL? **Usage**: The Server Variable param “HTTPS” equals value “On”
A list of server variables and their descriptions can be found at http://msdn.microsoft.com/library/default.asp?url=/library/en-us/iissdk/html/21b3be8f-d4ed-4059-8e21-6cba2c253006.asp.		
The Custom param equals value	Use custom parameters from the user. User parameters are defined in the codebehind of a web page. **param** - enter the name of a custom parameter. For example, AcctBlnc **value** - the value associated with the parameter. For example, 1000	Is the user's account balance $1000? **Usage**: The Custom param “AcctBlnc” equals value “1000”

5. Click **Next**.

Step 2 of the Wizard prompts you select an action to take if conditions are true. Check the boxes for the actions to take. Click the blue links to add the appropriate information.

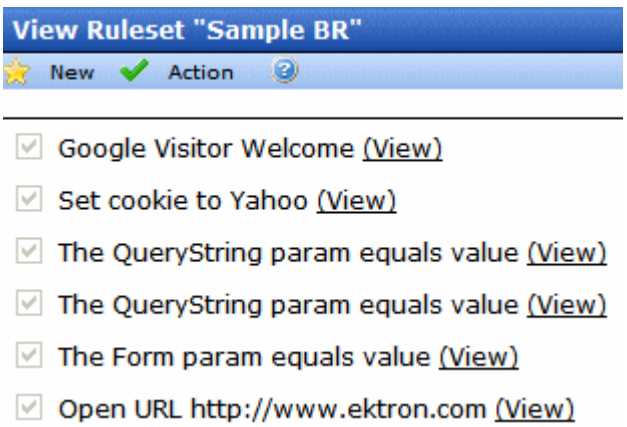


Conditions Table

Action	Description
Display Calendar ID	Enter a CMS400.NET Calendar ID.
Display a Message	Enter a message to be displayed.
Open URL	Enter a URL. This opens a new window with the URL.
Popup A Message	Enter a message that appears in a popup dialog box.
Redirect to a URL	Enter a URL to redirect a the site visitor's browser.
Set Cookie to Value	Creates a cookie on the site visitor's system. Enter **Name** for Cookie and the name of the cookie for Value.

Action	Description
Display Content Block ID	Enter a CMS400.NET content block's ID.

6. Click **Next**.
7. Step 3 of the Wizard lets you select actions to take when conditions are false. This works the same as Step 2 of the Rules Wizard. For descriptions of the actions, see "Conditions Table" on page 628.
8. Click **Next**.
9. Step 4 of the Wizard asks you to enter a name for the rule in the text box.
10. Click **Done**.
11. The View Ruleset screen appears. Your rule appears in the Ruleset box.


View Ruleset "Sample BR"
New
Action
Google Visitor Welcome (View)
Set cookie to Yahoo (View)
The QueryString param equals value (View)
The QueryString param equals value (View)
The Form param equals value (View)
Open URL http://www.ektron.com (View)

Add an Existing Rule to a Ruleset

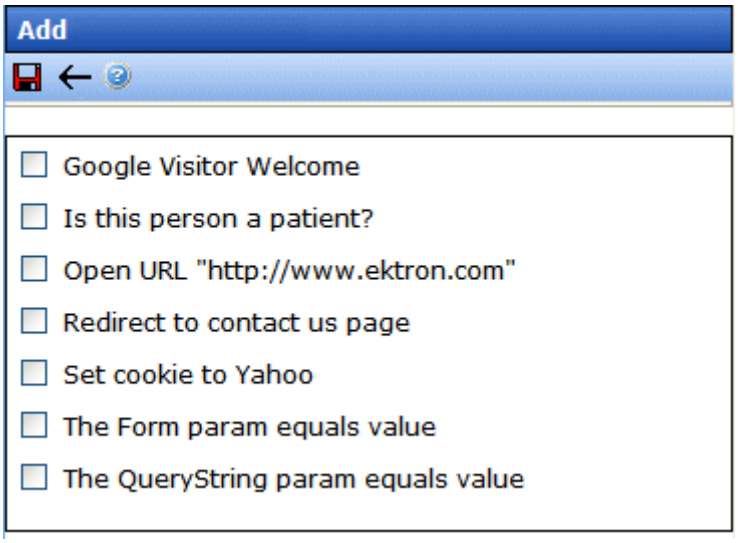
Because rules are not tied to a Ruleset once they are created, you can add a rule to more than one Ruleset. To add an existing rule to a Ruleset, follow these steps:

1. If you arrived here from the "Creating a New Business Rule Ruleset" on page 622 section, continue to the next step.

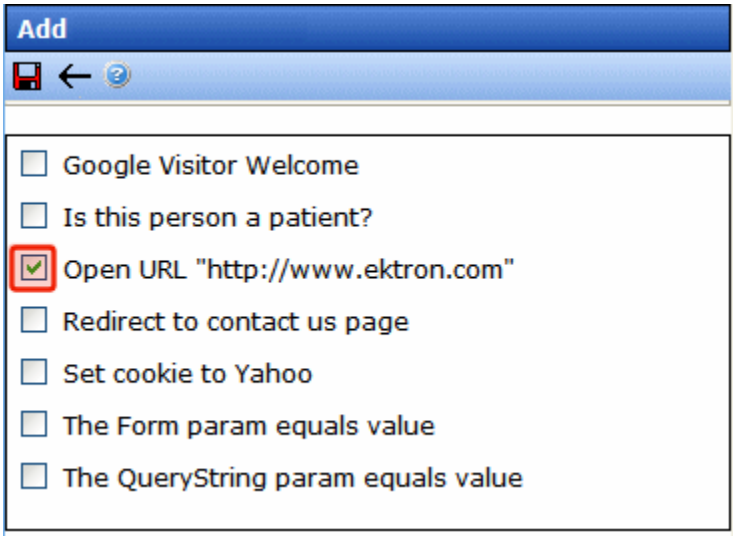
   Otherwise:

Navigate to the Business Rules screen in the Workarea by clicking **Modules** > **Business Rules**. Next, click the name of the Business Rule for which you want to add an existing rule.

2. Click **New > Add Existing**.
3. The Add an Existing Rule screen appears.



4. Check the rules to add to the Ruleset.

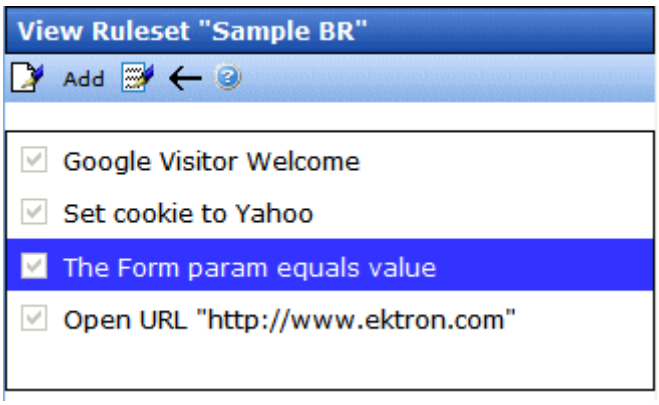


5. Click the Save button ( ).

Edit a Rule in a Ruleset

Following these steps to edit a rule in a Ruleset.

1. In the Workarea, navigate to **Modules** > **Business Rules**.
2. Select the Ruleset that contains the rule to be changed.
3. Highlight the rule to be changed.

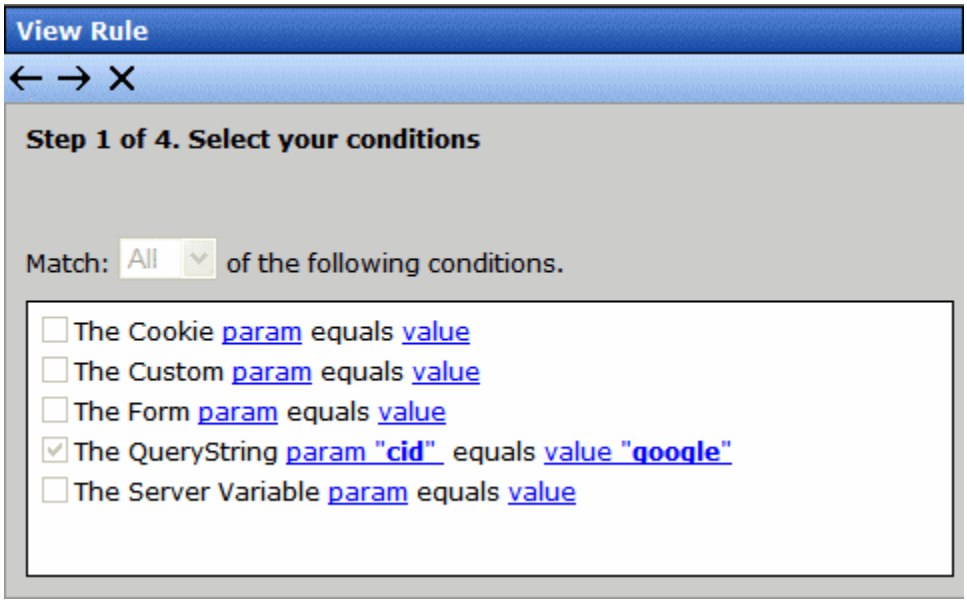


4. Click **Action > Edit Rule**.
5. The Rules Wizard appears with the rule loaded. Edit as necessary. The Rules Wizard is explained in "Add a New Rule to a Ruleset" on page 626.

Viewing a Rule in a Ruleset

To help you understand the contents of a rule, a (View) link appears next to each rule in a Ruleset. Click this link to launch a view window for the rule. This window displays settings for each Rules Wizard step applied to a rule.

NOTE The steps are not editable from this window. To edit rules in a Ruleset, see "Edit a Rule in a Ruleset" on page 632.


View Rule
Step 1 of 4. Select your conditions
Match: All of the following conditions.
The Cookie param equals value
The Custom param equals value
The Form param equals value
The QueryString param "cid" equals value "google"
The Server Variable param equals value

To navigate through the steps, use the Previous and Next Step buttons (← →). To close the window, click the Close button (✕).

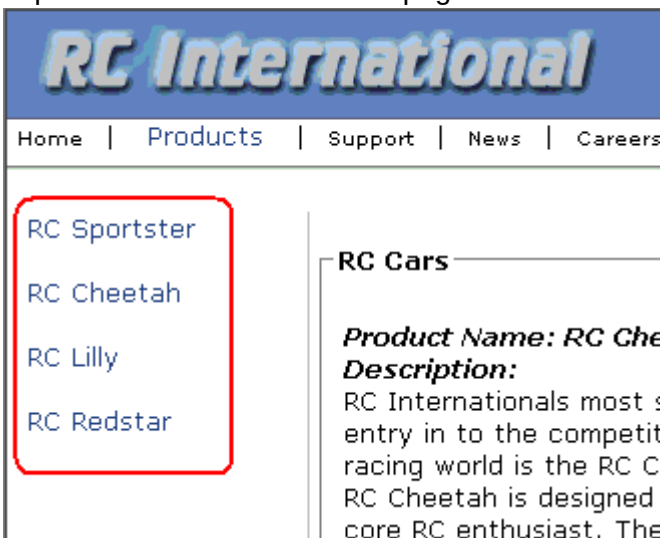
Permission to Work with Business Rules

Only members of the Administrators user group and those defined in the Manage Members for Role: Add Role Member Business Rule Editor screen can work with Business Rules. *See Also:* "Defining Roles" on page 795

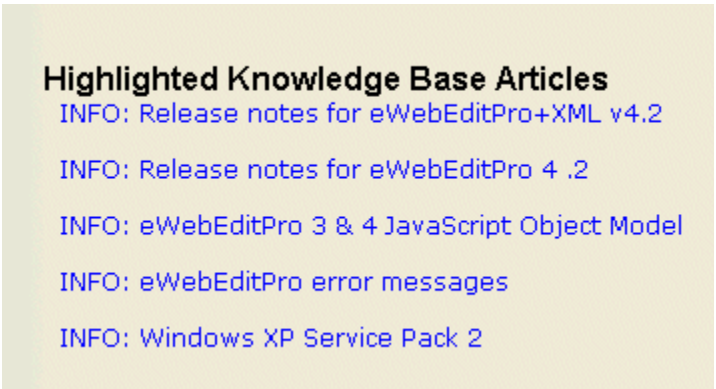
Web Site Navigation Aids

Collections

Ektron CMS400.NET's Collection feature lets users create a list of content that can be placed on a Web page to offer readers links to them. In the following illustration, the circled content is an example of a collection on a Web page.



Collections can also be used to display listings such as job postings, press releases, and Knowledge Base articles. The following graphic illustrates the use of a collection on the landing page of Ektron's Knowledge Base.


Highlighted Knowledge Base Articles
INFO: Release notes for eWebEditPro+XML v4.2
INFO: Release notes for eWebEditPro 4 .2
INFO: eWebEditPro 3 & 4 JavaScript Object Model
INFO: eWebEditPro error messages
INFO: Windows XP Service Pack 2

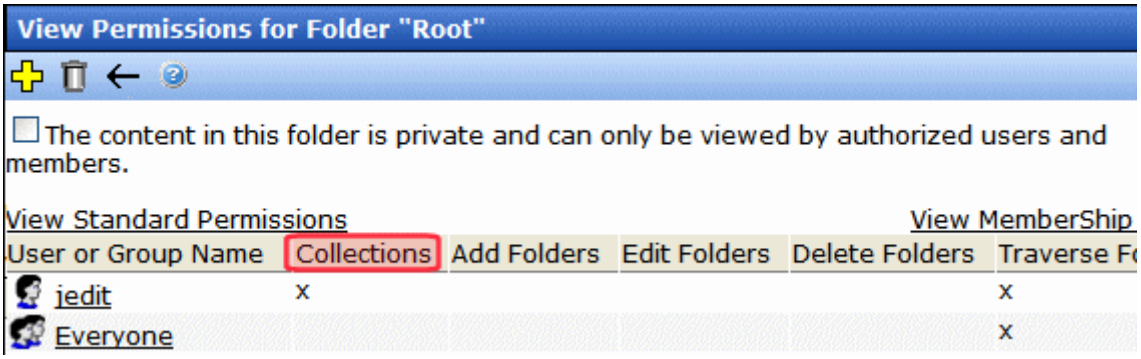
This section only describes managing permissions to use the Collections feature. For more information about the Collections feature, see the **Ektron CMS400.NET** User Manual section “Working with Collections.” *See Also:*

- ”Collection Permissions” on page 635
- ”Setting up Approval for Collections” on page 638

Collection Permissions

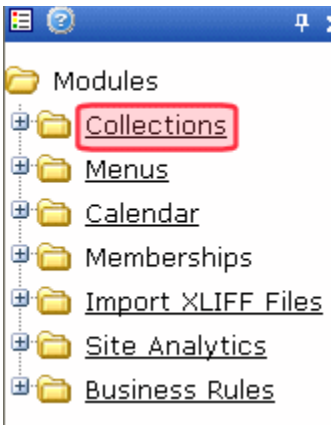
Any of the following users have permission to create or edit a collection.

- a member of the Administrators group
- a user who has been assigned the Collection and Menu Admin role. *See Also:* ”Defining Roles” on page 795
- a user who has been granted collection permission for the collection’s folder. Permission is granted on the folder Permission screen (see graphic below). *See Also:* ”Setting Permissions” on page 776

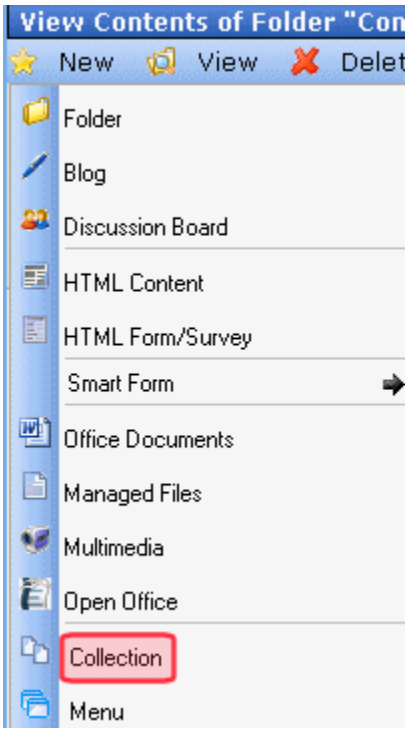


How a Folder is Assigned to a Collection

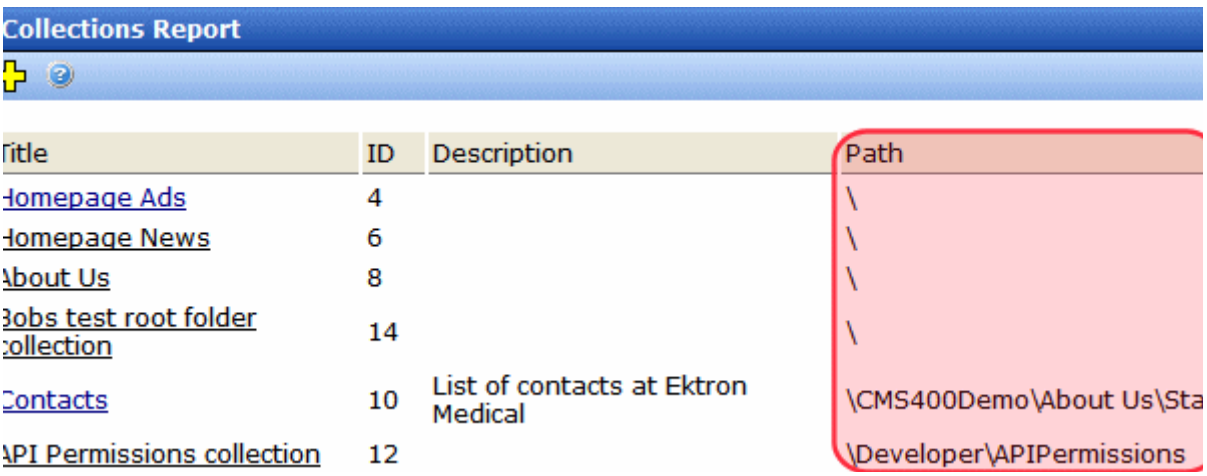
If you create a collection by going to the Workarea's **Modules** tab, it is assigned to the root folder.



If you create a collection by going to a folder then selecting **New > Collection**, it is assigned to that folder.



A collection's folder appears on the **Modules > Collections > Collection Report** screen, in the **Path** column. No value there indicates root folder.



Setting up Approval for Collections

If desired, you can set up an approval system for any collection. As with a content approval chain, you specify users who must approve changes to a collection before it can be published.

Any collection approver can either approve or decline the modified collection. And, if a user who is not an approver tries to delete a collection, that action also requires approval.

See Also:

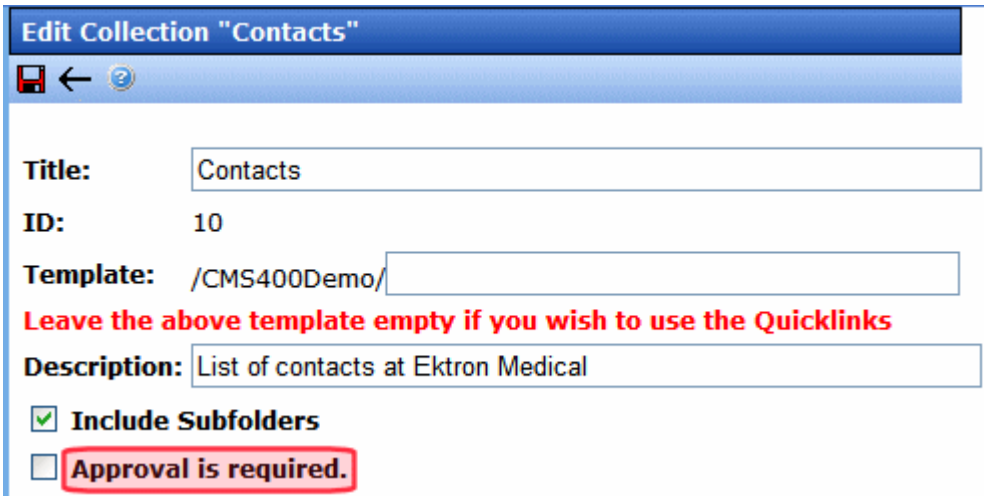
- ”Differences Between Content and Collection Approval Systems” on page 638
- ”Creating a Collection that Requires Approval” on page 638
- ”Which Users Can Approve Collections” on page 639
- ”What Happens When an non-Approver Submits Changes to a Collection” on page 639
- ”How Approvals Affect Deleting a Collection” on page 640

Differences Between Content and Collection Approval Systems

- While content can have a chain of approvers, a collection has a list of approvers. *Any collection approver can publish or decline changes*. There is no concept of a “chain” of approvers.
- While content approval is folder-specific, collection approval is not. Once set up, collection approval affects the collection to which it was assigned, regardless of its folder.

Creating a Collection that Requires Approval

Only administrators or users to whom the folder-admin role has been assigned see the **Approval is Required** checkbox on the Add and Edit Collection screens. *See Also:* ”Defining Roles” on page 795



When the collection is created, its status is set to checked out. This allows you to add items to it. When ready, you can publish it.

Which Users Can Approve Collections

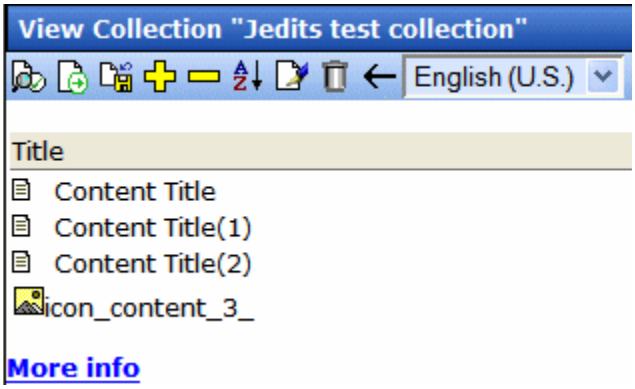
If you require a collection to be approved, only the following users have permission to create or edit a collection and can approve a change to a collection.

- a member of the Administrators group
- users to whom the Collection Approver role has been assigned and who have permission to work with the collection
- users to whom the Folder User Admin role has been assigned and who have permission to work with the collection

See Also: "Defining Roles" on page 795

What Happens When an non-Approver Submits Changes to a Collection

A user who has permission to edit collections but not approve changes sees the following buttons.



After making the change, the user clicks the submit button ( ). This action triggers an email notification to all approval users for the collection. It also changes the collection's status to checked out. No other users can edit it in this status.

Next, one of the approval users must open the Edit Collection screen and click the Publish or Decline button. If he clicks Publish ( ), the new version of the collection is published to your Web site. If Decline ( ), the user who submitted the changes is notified by email but no changes are made to your Web site.

If the user who made the changes realizes he made a mistake, he can go to the screen and click the Undo Checkout button at any time before the approval. In this case, his submitted changes are deleted, and the collection reverts to its original state.

In fact, any user with permission to edit a collection can perform the undo function until the content is approved.

How Approvals Affect Deleting a Collection

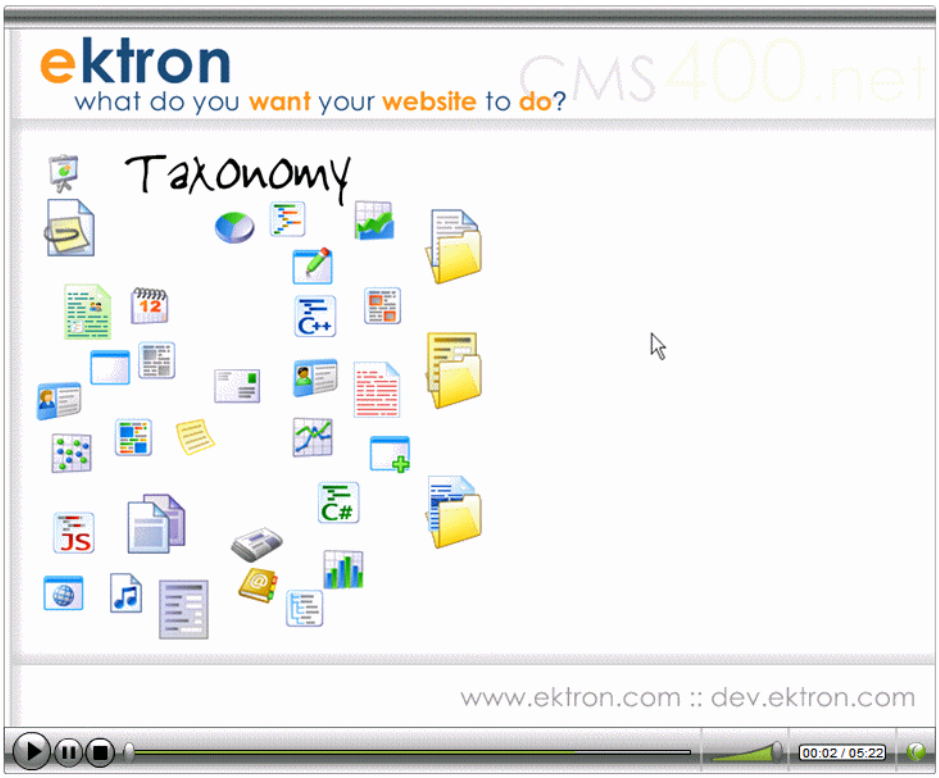
To delete a collection, a user who has permission to work with collections but not approve changes clicks the Delete button ( ) from the View Collection screen. This action changes the collection's status to Marked for Deletion (M) and triggers an email notification to all approval users for the collection. One of the approval users must open the Edit Collection screen and click the Delete or Decline button.

If the approval user clicks Delete ( ), the collection is removed from your Web site. If the approval user clicks Decline ( ), the user who submitted the deletion is notified by email but no changes are made to your Web site.

Taxonomy

Large amounts of content can be an organizational nightmare, and it takes a far reaching categorization model to allow content to be efficiently repurposed, searched for, and organized on a site. Ektron's taxonomy, a one-to-many relationship model, follows natural and organic methods all the way down to the content level, enabling an intuitive organization scheme that reflects how people think.

Click the following link to see a video introduction to taxonomy in **Ektron CMS400.NET**: http://www.ektron.com/learningcenter/taxonomy/taxonomy.html.



Ektron's taxonomy is a content-level categorization system that uses one-to-many relationships to create a scalable organization of content. Content is categorized in the database by how it relates to multiple categories, allowing it to be accessed in multiple ways for multiple purposes. The hierarchy of the content is arranged from the general to the specific, and there may be multiple "routes" that define the content at the end of the hierarchy.

This type of categorization lets you create a navigation structure (independent of the folder structure) that matches the way different site visitors want to find what they are looking for.

For example, Arnold Schwarzenegger can be thought of as an actor, Mr. Olympia or as a California governor. Taxonomy creates a one-to-many relationship with any content about Schwarzenegger and auto-generates navigation which can support all of the approaches to accessing any content about him. Site visitors can find the content whichever way that they think about it.

Ektron's taxonomy system plays key roles in more than just organizing content. CMS400.NET's URL Aliasing is able to auto-generate human readable and SEO-friendly addresses based on the taxonomic structure of the page. Because it is using the various ways that people relate to the content to determine the alias, search engines will find it based on multiple terms as well.

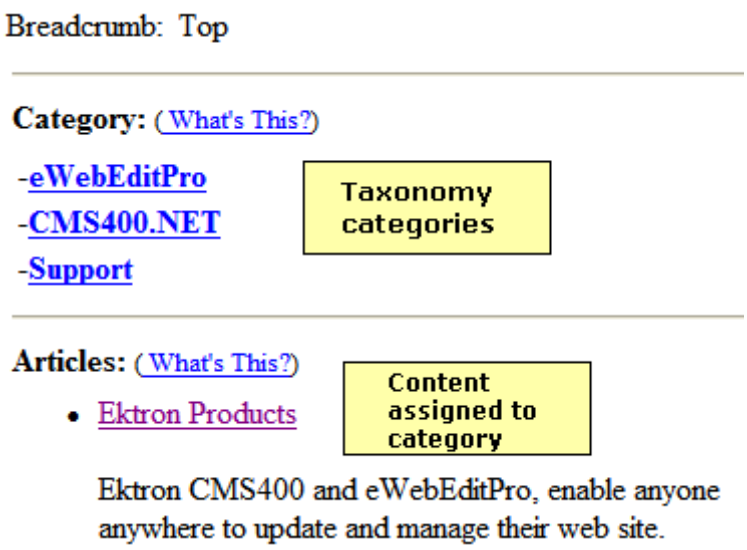
A taxonomy directory control can automatically create the navigation on your Web site. Once the content is tagged, it automatically shows up in the correct section of the site. The author doesn't need to know where the content is going to show up, the taxonomy tagging will determine that. If you are managing large amounts of information, this use of taxonomy is especially powerful.

Taxonomy can also improve search functionality, and Ektron's integrated search takes full advantage of it.

Introduction to Creating a Taxonomy

When working with content, you can place a listing of those categories (a *taxonomy*) on a Web page. When that page displays, the taxonomy's categories appear, followed by all published items in the taxonomy.

To help site visitors find your Web site's content via a taxonomy, your developer places a Directory server control on a Web page. It looks something like this.



There is no limit to the number of category levels you can assign to a taxonomy.

Also, a taxonomy can provide a link to all content in a folder, so the display is based on folder structure. Alternatively, you can assign content items from various folders to a taxonomy.

To illustrate the benefits of a content-based taxonomy, assume your Web site is for a college. Several items relating to the graduate school are organized under major departments: Admissions, Academics, Faculty, Library, etc. You can create a Graduate School taxonomy, use it to categorize all content relevant to graduate students (regardless of their department), and display them on a graduate students page.

The following sections explain Taxonomies in more detail.

- "Creating a Taxonomy" on page 645
- "Assigning a Taxonomy/Category to Content or Users" on page 657

- ”Additional Taxonomy/Category Tasks” on page 670
- ”Displaying a Content Item Taxonomy Search on your Web Site” on page 686
- ”Multi-Language Support for Taxonomies” on page 687
- ”Using Taxonomies with Social Networking” on page 694

Creating a Taxonomy

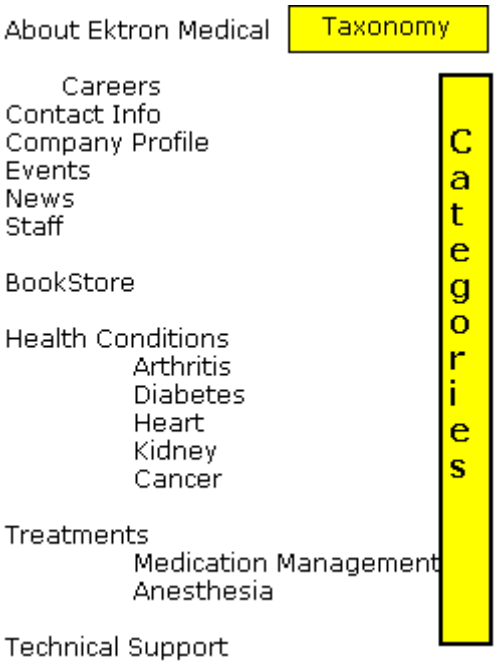
Follow these steps to create and deploy a taxonomy.

1. ”Planning the Taxonomy” on page 645
2. ”Creating a Taxonomy” on page 646
3. ”Applying a Template to a Taxonomy or Category” on page 651
4. ”Assigning a Taxonomy Configuration” on page 654
5. ”Assigning a Taxonomy/Category to Content or Users” on page 657
6. ”Assigning a Folder to a Taxonomy/Category” on page 667
7. ”Insert the Directory Server Control on a Web Page” on page 670

Planning the Taxonomy

It helps to design a taxonomy on paper before creating it in **Ektron CMS400.NET**. This can let you determine relationships among the kinds of information before you try to implement the taxonomy.

As an example, here is a hierarchy of some content in the **Ektron CMS400.NET** sample site. The top level item is the taxonomy. All levels below it are categories.



Next, review the site content and decide which content items and folders to assign to which taxonomy categories. Some categories may map directly to a folders. Other categories may use content from several folders.

Once you determine how content and folders will be assigned to taxonomy categories, sign on to **Ektron CMS400.NET** and set up those relationships.

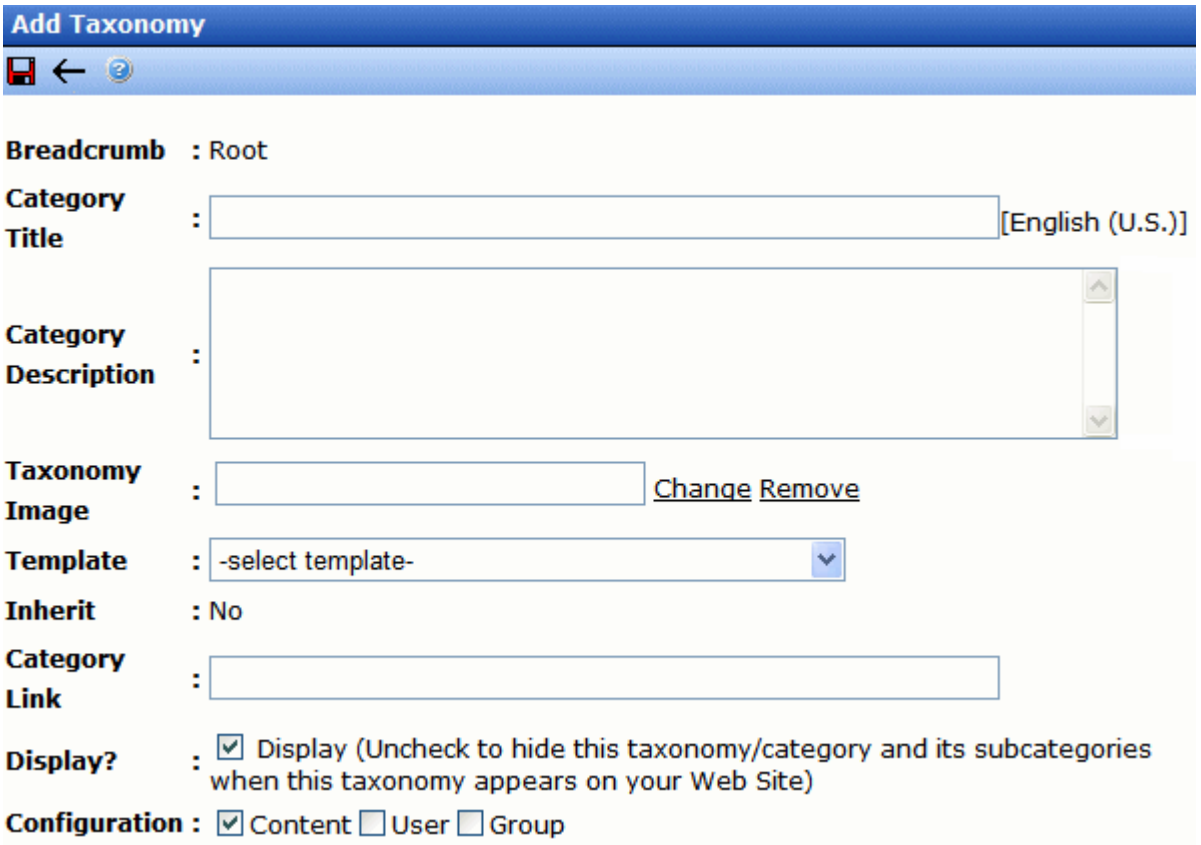
Creating a Taxonomy

NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

1. From the Workarea, go to **Modules > Taxonomy**.
2. Use the language selector pull-down to choose a language for the taxonomy (see below).

See Also: "Creating a Taxonomy in a Multi-Language Environment" on page 688

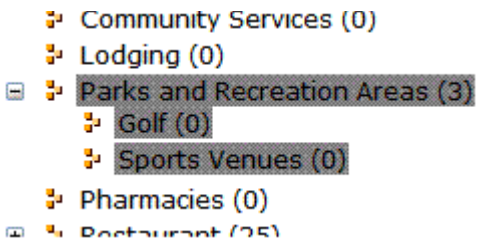
3. Click the Add Category button ( ).
4. The Add Taxonomy or Category screen appears.


Add Taxonomy
Breadcrumb : Root
Category Title : [English (U.S.)]
Category Description :
Taxonomy Image : Change Remove
Template : -select template-
Inherit : No
Category Link :
Display? : Display (Uncheck to hide this taxonomy/category and its subcategories when this taxonomy appears on your Web Site)
Configuration : Content User Group

5. Use the following table to complete the screen.

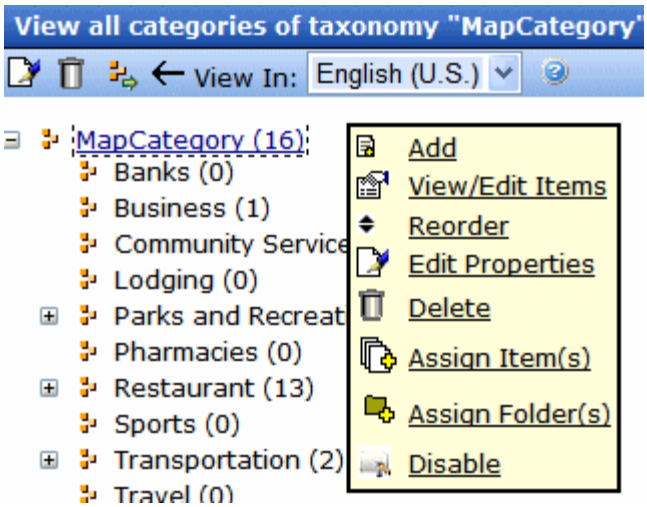
Field	Description	For more information, see
Category Title	Give the taxonomy a title. The title identifies the taxonomy wherever it appears.	
Category Description	If desired, enter a more complete description of the taxonomy. It appears only on the Edit Taxonomy screen.	

Field	Description	For more information, see
Taxonomy Image	If desired, you can assign an image to this taxonomy. For example, in the eCommerce feature, you could display this taxonomy image to indicate the type of products that make up the taxonomy. To display the taxonomy image, use Ektron CMS400.NET's API. A sample of how to do this is provided in the following file: *site root/* `developer/taxonomy/taxonomy_image.aspx`. To see the sample on a Web page, go to the **Developer sample page > Taxonomy > Taxonomy Image**. To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`.	
Template	If desired, select a template to apply to the taxonomy or category.	"Applying a Template to a Taxonomy or Category" on page 651
Inherit (only appears when creating a category underneath a taxonomy)	Check this box if you want this category to inherit its template from the parent category or taxonomy. If not, assign a template using the **Template** field (above).	
Category Link	Use this field to direct a Web site visitor who clicks this taxonomy/category to any page on your Web site. For example, when someone is using your site's company directory and clicks Human Resources > Benefits, he is directed to that area of your Web site. Without a Category Link, if a site visitor clicks a taxonomy category, the results appear on the same page. Enter a path to a destination page relative to your site root folder. For example, `aboutus.aspx`. When a site visitor clicks this taxonomy/category, he is directed to `http://`*`your URL/Site root folder`*`/aboutus.aspx`. You could also direct the user to a content ID, such as `aboutus.aspx?id=62`.	

Field	Description	For more information, see
Display?	Check this box if you want this taxonomy/category and its subcategories to appear when this taxonomy appears on your Web site. Use this field to block certain categories from appearing as part of this taxonomy. For example, you have not finished creating content for the category, so you don't want it to appear yet. If you uncheck this box, this node and its child nodes are indicated by a gray background (see image below).  The gray background also appears when users work with this taxonomy/category on the Edit Content screen's **Category** tab. This setting does not prevent you from assigning taxonomies/categories in the **Ektron CMS400.NET** Workarea.	
Configuration	Select a configuration with which to associate the taxonomy. • Content • User • Group Notes: * By default, a new taxonomy's configuration is content. * This field only appears for a taxonomy. It does not appear for categories, which are below the taxonomy.	"Assigning a Taxonomy Configuration" on page 654

6. Click the Save button ( ).
7. The View All Taxonomies screen reappears, and you can see the new taxonomy.

8. Next, assign items and/or folders to the taxonomy. To do that, click it from the View All Taxonomies screen.
9. Hover the cursor over the taxonomy. A menu appears.



See Also: "Numbers on the View Categories Screen" on page 656

10. If you want to assign content, folders, etc. to this taxonomy, click **Assign Item(s)** or **Assign Folder(s)**. These procedures are more fully explained in "Assigning a Taxonomy/Category to Content or Users" on page 657 and "Remove Content from a Taxonomy/Category" on page 678.

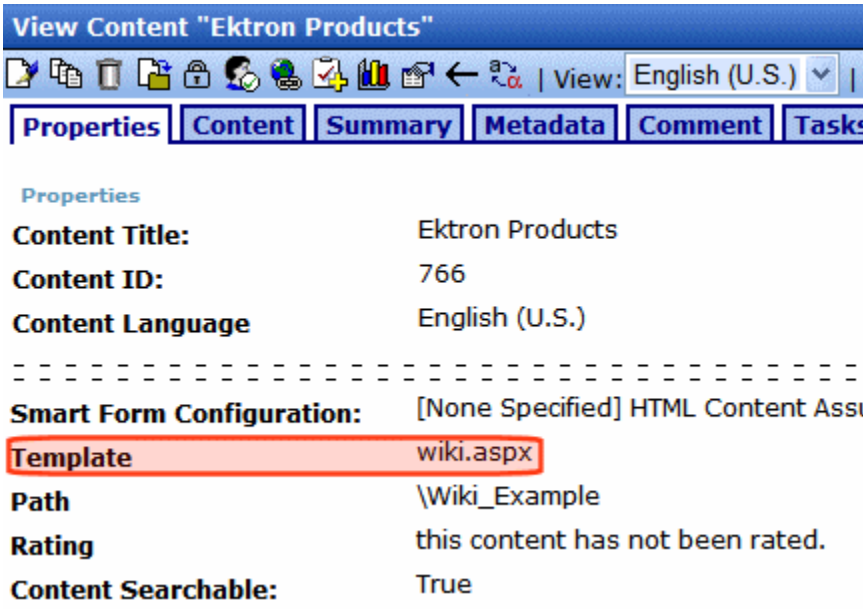
NOTE You can also assign a Taxonomy to content using the Edit Content in Folder screen's **Category** tab. *See Also:* "Assigning a Taxonomy/Category to Content or Users" on page 657

11. If you want to add categories and subcategories underneath the top level taxonomy, click **Add**. *See Also:* "Add a Category to a Taxonomy/Category" on page 677

Applying a Template to a Taxonomy or Category

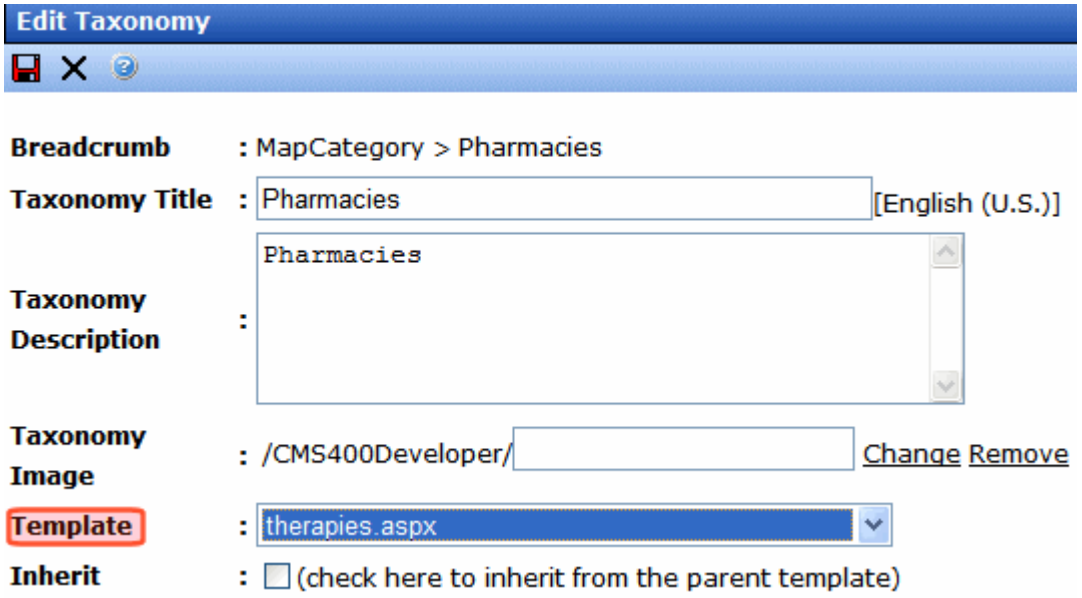
Taxonomy categories are designed to help site visitors find content. To provide a taxonomy-based search, your developer places a Directory server control on a Web page.

By default, when a user clicks a hyperlink on such a Web page, it uses the template assigned to the linked content (as illustrated below). *See Also:* "Creating/Updating Templates" on page 70



If you want to display the linked content using a different template, follow these steps.

1. When creating or editing a taxonomy or category, select the appropriate template at the **Template** pull-down field.


Edit Taxonomy
Breadcrumb : MapCategory > Pharmacies
Taxonomy Title : Pharmacies [English (U.S.)]
Taxonomy Description : Pharmacies
Taxonomy Image : /CMS400Developer/ Change Remove
Template : therapies.aspx
Inherit : (check here to inherit from the parent template)

NOTE Any category below the root level can inherit its parent's taxonomy template. Use the **Inherit** checkbox to do this.

You may need a developer's help with the rest of these steps.

2. In Visual Studio.Net, open the .aspx page that contains the directory server control.
3. Look at the server control's **MarkupLanguage** property.
4. If the property is blank, open the following file: *site root/* `workarea/template/taxonomy/taxonomy.ekml`.

   If the property displays an .ekml file, open that file. Its path may be listed in the property. If the .ekml file's path is blank, it is `workarea/template/taxonomy/`.
5. Find the following line:

```
[$HyperLink]<br/>[$Teaser]
```

6. Replace it with the following:

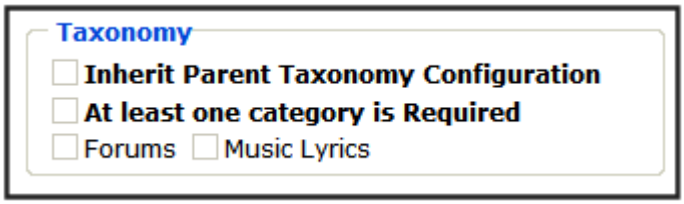
```
<a href="[$TemplateQuickLink]">[$Title]</a><br/>[$Teaser]
```

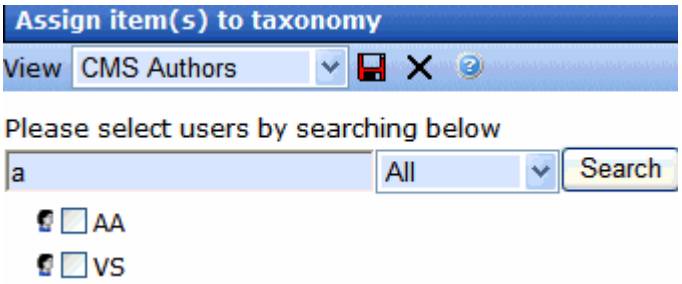
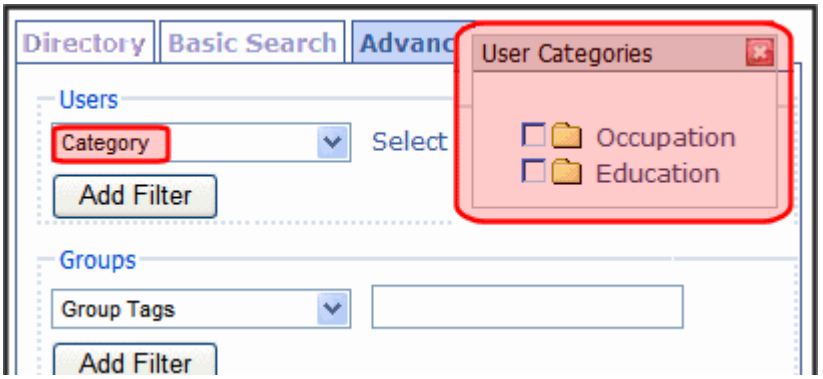
7. Save the .ekml file.

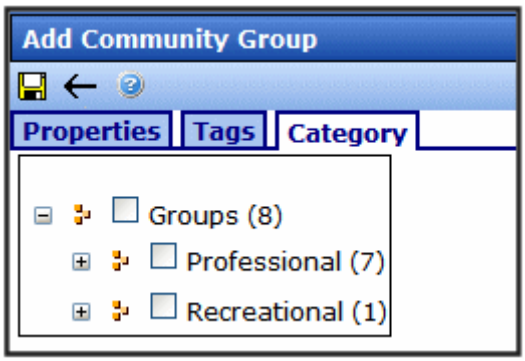
The content selected from this Directory server control will now use the template assigned to the taxonomy/category.

Assigning a Taxonomy Configuration

There are three taxonomy configurations (that is, types). Each taxonomy is one of these types.

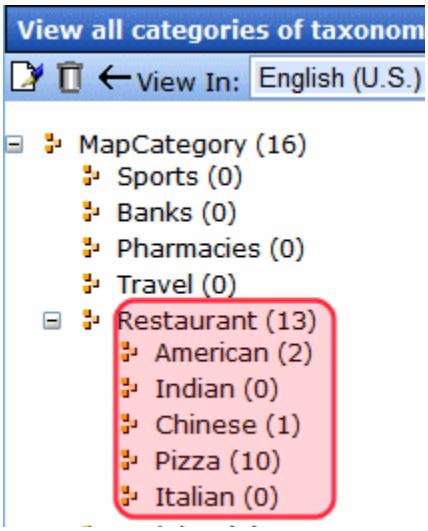
Configuration	Result
Content	Associate this taxonomy with content. When this configuration is selected • you can assign content to the taxonomy/category • the taxonomy category appears on every folder's properties screen (shown below) 

Configuration	Result
User	Associate this taxonomy with CMS or membership users. You select users for this taxonomy on the Assign Items to Taxonomy screen.  After users are assigned to a taxonomy, they can be found via the CommunitySearch server control's **Advanced** tab. From the **Advanced** tab, select **Category** from the **Users** dropdown, and a User Categories selector appears (shown below).  *See Also:* "Using Taxonomies with Social Networking" on page 694

Configuration	Result
Group	This taxonomy's categories can be assigned to community groups from the **Category** tab of the Edit Community Group screen. See example below.  If you do not check this box, users can only view taxonomy/category assignments on the **Category** tab. Whether or not this box is checked, you can assign taxonomy categories to community groups via the View All Categories of Taxonomy screen. *See Also:* • "Viewing a Taxonomy" on page 671; • "Assigning a Taxonomy or Category to Community Group via the Edit Community Group Screen" on page 669 • "Using Taxonomies with Social Networking" on page 694

Numbers on the View Categories Screen

On the View All Categories of Taxonomy screen, the number to the right of any taxonomy/category is a *cumulative* total of all items assigned to it *and its subcategories*. In the example below, the three subcategories have a total of 13 items (2 + 1 + 10).



Since the number to the right of the parent category equals the number assigned to all subcategories, you know that no items are assigned to the parent category.

Also, the number includes individual items plus all items in any assigned folders. So, for example, if one content item and one folder are assigned to a category, and the folder has five items, the category's number is six.

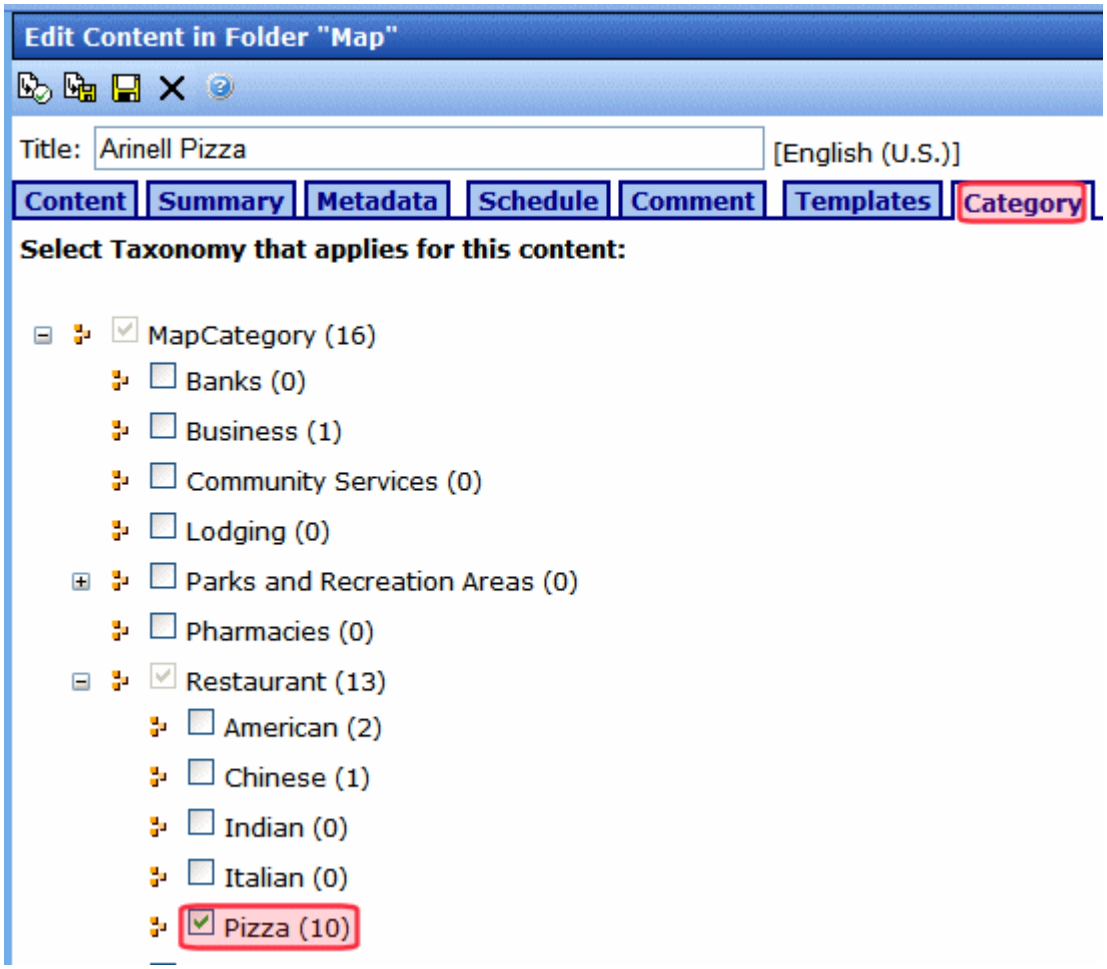
Assigning a Taxonomy/Category to Content or Users

There are three ways to assign a taxonomy or category to content or users.

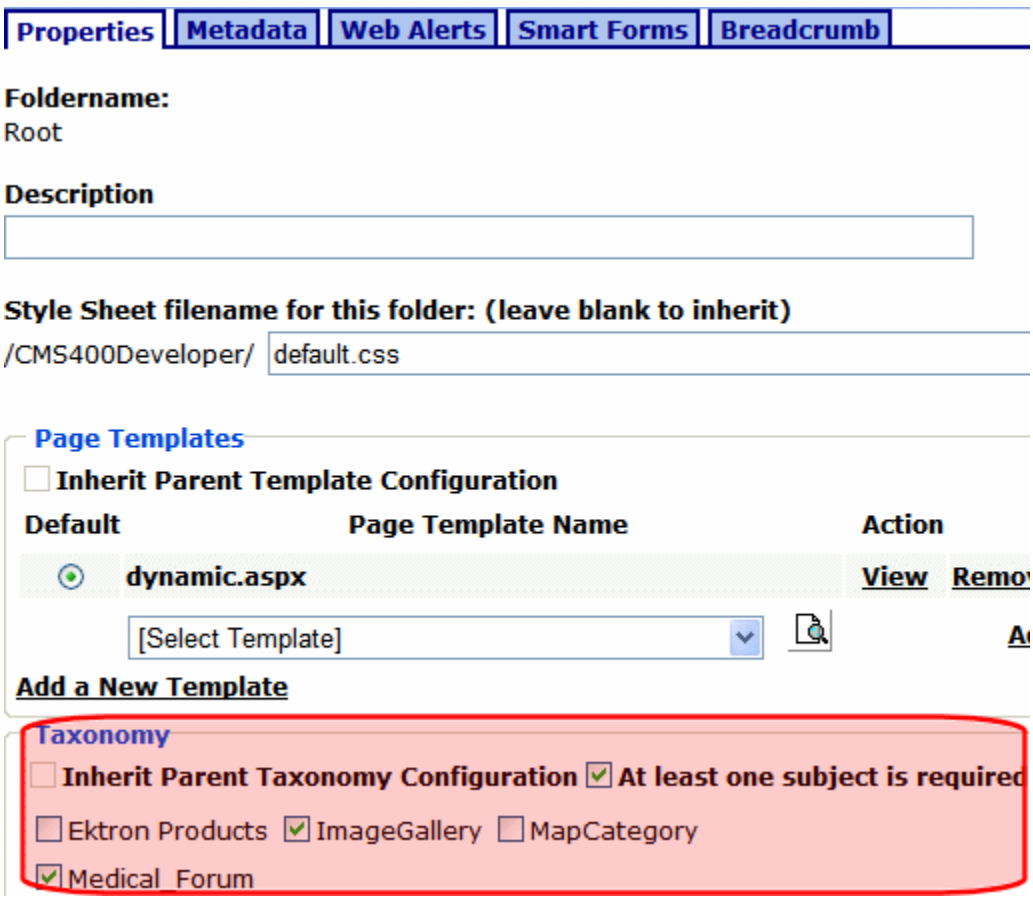
To assign a a taxonomy category to	Available methods	Prerequisites	For more information, see
Content Note: Regardless of the method you use to assign a taxonomy to content, the result is the same.	from the Edit Content in Folder screen	• Must be authorized to edit the folder's content • You can only select from taxonomies assigned to the content's folder	"Content Editor-Based Taxonomy Assignment" on page 658
	from the Modules > Taxonomy screen	Must be member of administrators group or Taxonomy administrator	"Administrator-Based Taxonomy Assignment" on page 663
Users	from a community group	Taxonomy's Configuration > Group check box is checked	"Assigning a Taxonomy or Category to Community Group via the Edit Community Group Screen" on page 669

Content Editor-Based Taxonomy Assignment

Ektron CMS400.NET lets content editors assign a taxonomy category to content. They do this by navigating to a content block, clicking its **Category** tab, opening a taxonomy, and checking the correct level.



However, all taxonomies may not be available to every content item. Use a folder property's **Taxonomy** area to control which taxonomies can be assigned to a content in that folder.



For example, a folder's content consists of restaurants, and you want to restrict users to the Restaurant taxonomy -- users cannot assign other categories to that folder's content.

The following topics explain how administrators set up a folder's taxonomy properties, and how a user assigns taxonomy categories to content in that folder.

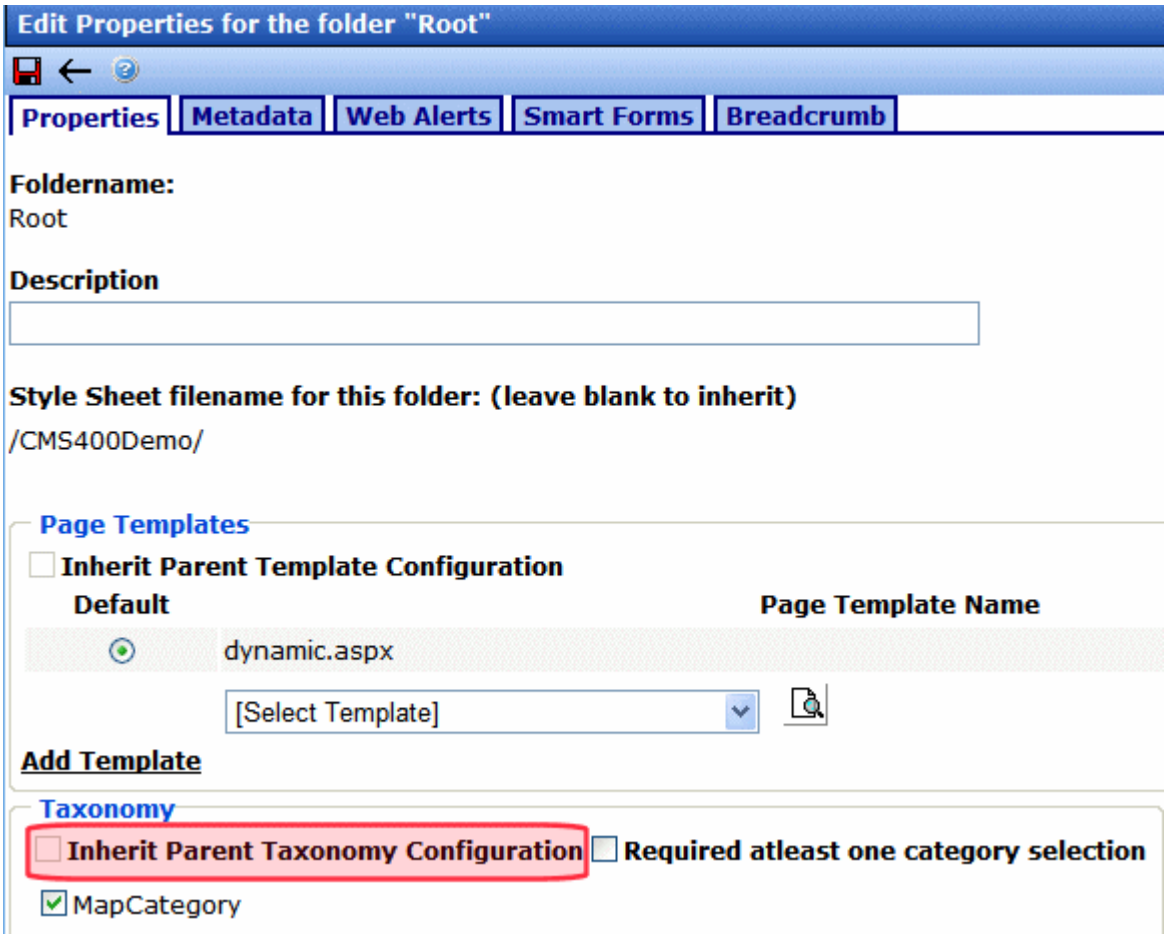
- "Assigning Taxonomies to a Folder" on page 661
- "Inheriting Taxonomies from a Parent Folder" on page 662
- "Requiring Content to Have at Least One Category Assigned" on page 662
- "Assigning a Taxonomy or Category to Content via the Edit Content Screen" on page 662

- "How a Folder's Taxonomy Properties are Affected by Multi-Language Support" on page 691

Assigning Taxonomies to a Folder

To make a taxonomy available to a folder, follow these steps.

1. Navigate to the folder.
2. Choose **View > Folder Properties**.
3. In the **Taxonomy** section of the screen (shown below), uncheck the **Inherit Parent Taxonomy Configuration** checkbox. *See Also:* "Inheriting Taxonomies from a Parent Folder" on page 662
4. Check taxonomies that should be available to this folder.



5. From now on, users editing content in this folder can assign categories from the selected taxonomies.

Inheriting Taxonomies from a Parent Folder

Unlike some folder properties, Taxonomy settings are not inherited from a parent folder by default. But you can cause them to be inherited if that is appropriate.

If you are not working on the root folder and the appropriate set of Taxonomies is applied to a folder's parent folder, go to the folder's properties screen and check the **Inherit Parent Taxonomy Configuration** checkbox.

Requiring Content to Have at Least One Category Assigned

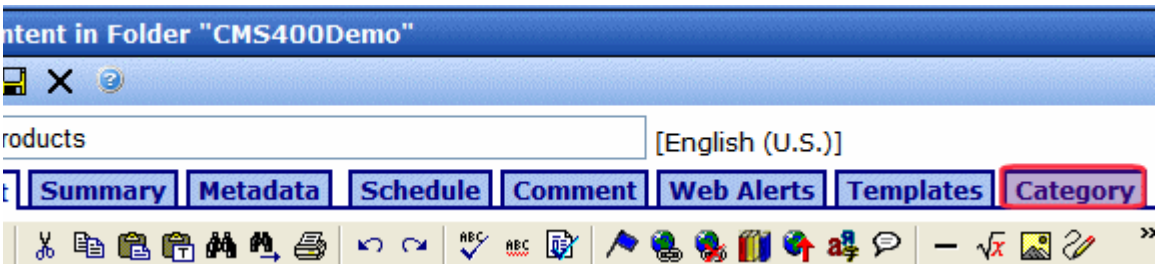
In the folder properties, you can require all content to be assigned at least one taxonomy category. If you do, when content in that folder is saved, **Ektron CMS400.NET** checks for at least one taxonomy category. If none is found, the user is notified that he must assign a taxonomy category before he can save the content.

To set a folder-level requirement for all content to be assigned a taxonomy category, follow these steps.

1. Navigate to the folder.
2. Choose **View > Folder Properties**.
3. In the Taxonomy section, check the **Require at Least One Category Selection** checkbox.

Assigning a Taxonomy or Category to Content via the Edit Content Screen

1. Navigate to a content item.
2. Hover the cursor over the adjacent triangle and click.
3. Click **View** from the dropdown menu.
4. From the View Content screen, click the Edit button ( ).
5. Click the **Category** tab.

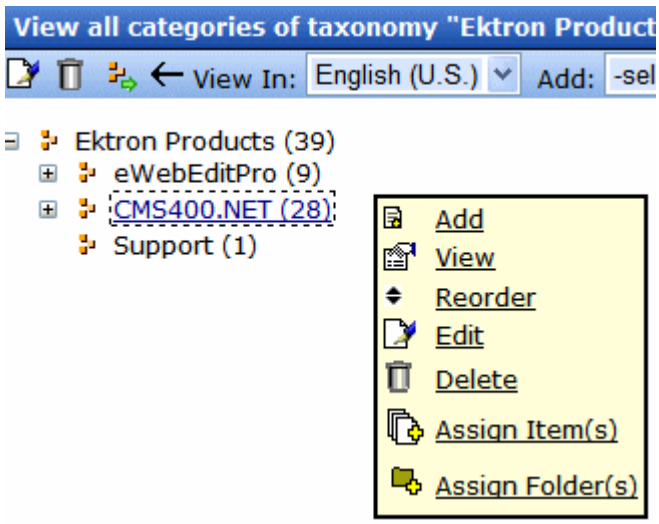


6. Check the taxonomies or categories to apply.
7. Save the content.

Administrator-Based Taxonomy Assignment

Assigning Content to a Taxonomy/Category

Members of the administrators group or taxonomy administrators can assign taxonomy categories to content via the View All Categories of Taxonomy screen. *See Also:* "Defining Roles" on page 795

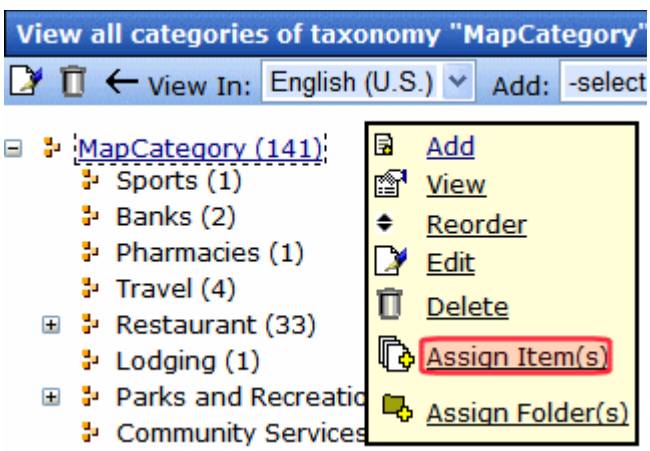


1. From the Workarea, go to **Modules > Taxonomy**.

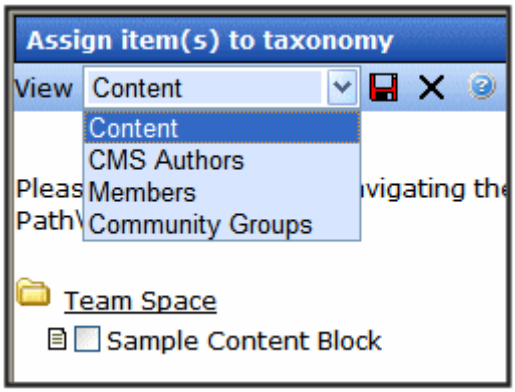
2. Select a language whose taxonomies you want to work with (see image below). You can choose **All**.

See Also: "Assigning Content to a Multi-Language Taxonomy" on page 690

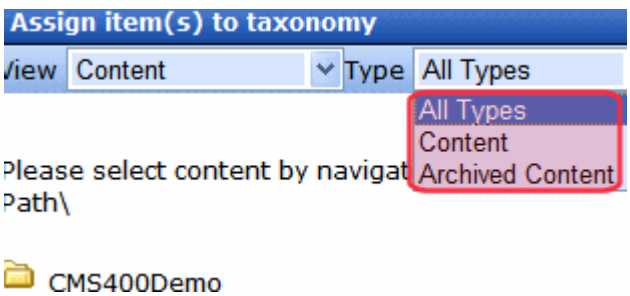
3. Select a taxonomy.
4. The taxonomy appears on the View All Categories of Taxonomy screen.
5. Select the category to which you want to assign content.
6. Click **Assign Item(s)**.



7. Choose the object type of the item to associate.



8. If you selected **Content** as the object type, you can narrow down the type of content you wish to see via the **Type** pull-down.



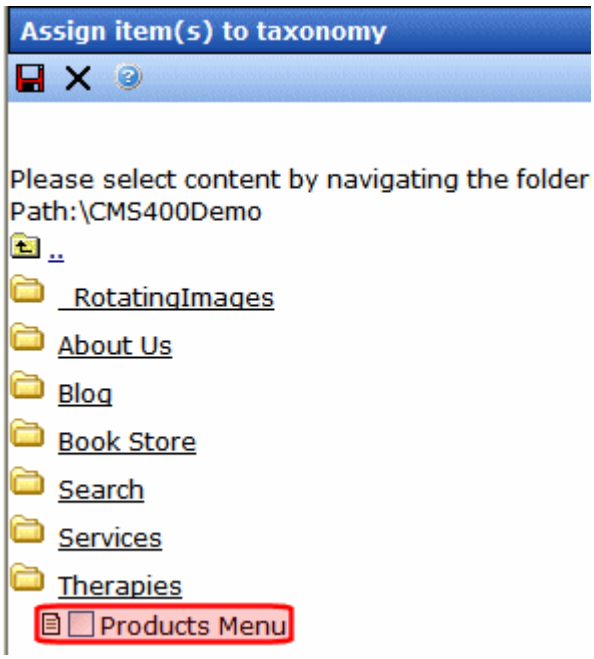
- **All types** - both archived and active content
- **Content** - active content only
- **Archived Content** - only content that has been archived and set to remain on site *See Also:* Ektron CMS400.NET User Manual section “Scheduling Content to Begin and End” > “Setting Archive Options”

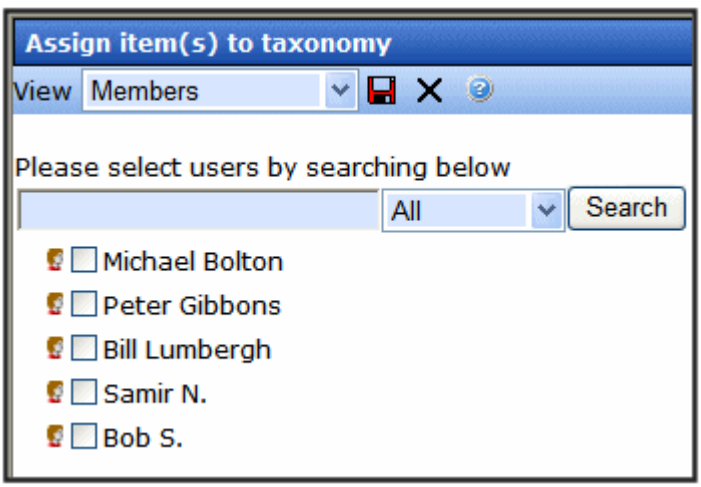
9. Navigate to the folder that contains the content you want to assign to the taxonomy or category.

   or

   Search for the user or community group to assign to the taxonomy or category.

NOTE Folder content appears below the folder list (see below). Also, only content in the selected language appears.





10. Check the box to the left of content, user or community group you want to assign. You can assign all types of content, even blogs.

Assigning a Folder to a Taxonomy/Category

NOTE If you assign a folder, the internal relationship is between the folder's content and a taxonomy category. The folder is merely a convenience for creating this relationship. There is no data connection between a folder and a taxonomy category.

You can assign a folder to a taxonomy, thereby displaying published content in the folder *when the page is viewed*. As content is added to or removed from the folder, the taxonomy on the Web page changes dynamically.

For example, you have a "Top News Stories" folder, in which old news items are frequently replaced by newer ones. The taxonomy only shows the latest news items. The updating of the content is handled by the taxonomy automatically.

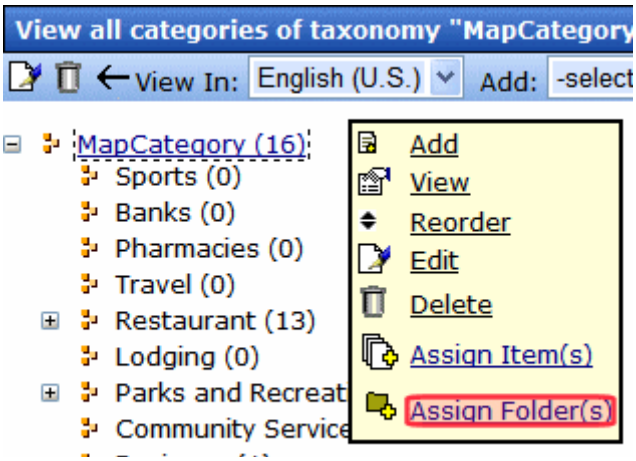
NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

To assign a folder to a taxonomy category, follow these steps.

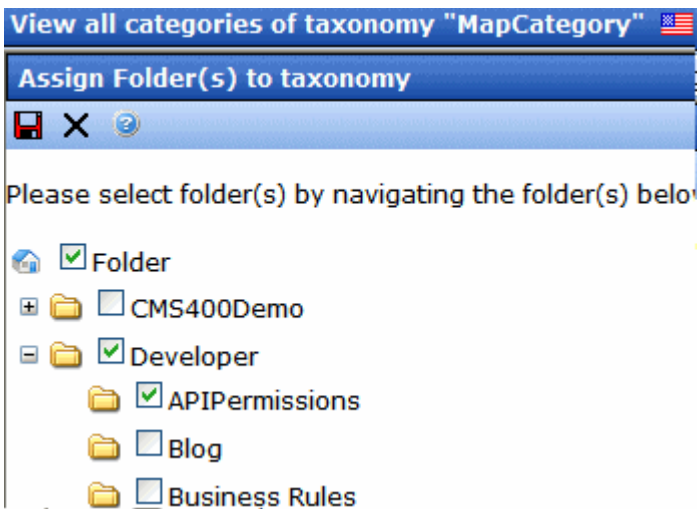
1. From the Workarea, go to **Modules > Taxonomy**.
2. Select the language of the taxonomy that you want to work with.

See Also: "Assigning Folders to a Multi-Language Taxonomy" on page 693

3. Select the taxonomy from the View All Taxonomies Screen.
4. Select the taxonomy or category under which you want to assign a folder.
5. Click **Assign Folder(s)**.



6. Navigate to the folder you want to assign to the taxonomy or category.
7. Check the box to the left of all folders you want to assign.

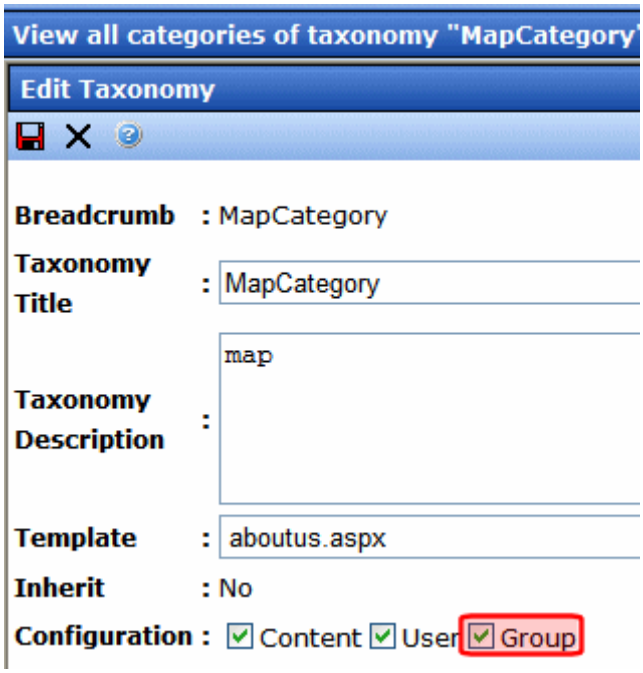


IMPORTANT! Only checked folders are assigned to the taxonomy/category. Checking a parent folder has no effect on its child folders.

Assigning a Taxonomy or Category to Community Group via the Edit Community Group Screen

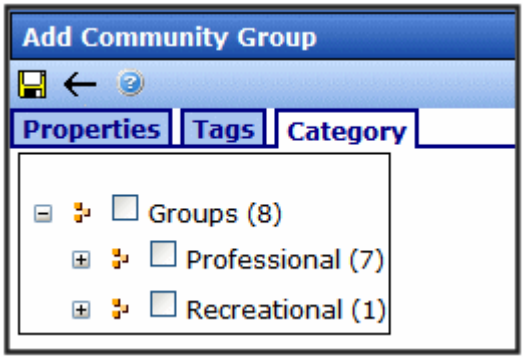
Prerequisite

You can perform this procedure only if a taxonomy's **Configuration > Group** check box is checked.



If it is not checked, you can view the taxonomy categories assigned to a Community Group on the Edit Community Group Screen. And, you can assign Community Groups to a Taxonomy via the View all Categories of Taxonomy screen.

1. In the Workarea, navigate to **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Select a community group.
3. Select the **Category** tab.



4. Check the taxonomies or categories to apply.
5. Click the **Save** button.

Insert the Directory Server Control on a Web Page

See the **Ektron CMS400.NET** Developer Manual chapter "Introduction to Ektron CMS400.NET Server Controls" > "Directory Server Control."

See Also: "Displaying a Content Item Taxonomy Search on your Web Site" on page 686

Additional Taxonomy/Category Tasks

The following sections explain additional tasks you can perform when working with a Taxonomy or its categories.

- "Viewing All Taxonomies" on page 671
- "Viewing a Taxonomy" on page 671
- "Edit a Taxonomy/Category's Fields" on page 675
- "Delete a Taxonomy/Category" on page 676
- "Add a Category to a Taxonomy/Category" on page 677
- "Remove Content from a Taxonomy/Category" on page 678
- "Remove Folder from a Taxonomy/Category" on page 680

- "Change Order of Categories Assigned to a Taxonomy/Category" on page 681
- "Change Order of Content Assigned to a Taxonomy/Category" on page 682
- "Importing and Exporting a Taxonomy" on page 683

Viewing All Taxonomies

The View All Taxonomies screen displays all taxonomies currently in **Ektron CMS400.NET**. The language pull down lets you filter the list by a language.

To work with any taxonomy, select it. When you do, it appears within the View All Categories of Taxonomy screen.

You can also use the View All Taxonomies screen to perform these tasks.

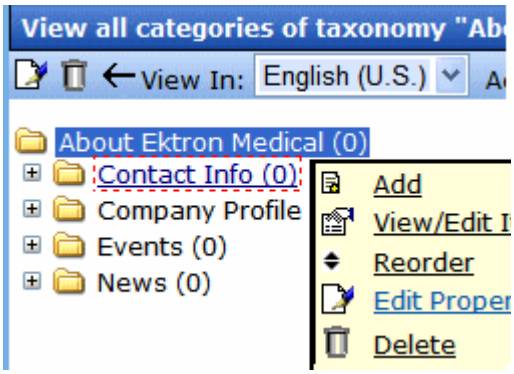
Button	Task	For more information, see
	Add new taxonomy	"Creating a Taxonomy" on page 646
	Delete one or more taxonomies	"Deleting a Taxonomy from the View All Taxonomies Screen" on page 676
	Import a taxonomy	"Importing and Exporting a Taxonomy" on page 683
	Export for Translation	"Using the Language Export Feature" on page 890

Viewing a Taxonomy

The View All Categories of Taxonomy screen exposes all categories in a selected taxonomy.

Use this screen to perform tasks on a taxonomy or one of its categories, such as adding new categories, assigning content to a category, and changing the order of items.

NOTE On the View All Categories of Taxonomy screen, a dashed box indicates the selected Taxonomy/category (see below).



To access the View All Categories of Taxonomy screen, follow these steps.

1. From the **Ektron CMS400.NET** Workarea, go to **Modules > Taxonomy > View All Taxonomies**.
2. Use the language pull-down to select the language of the taxonomy you want to work with.

3. Click a taxonomy.

Tasks you can perform from this screen are listed below.

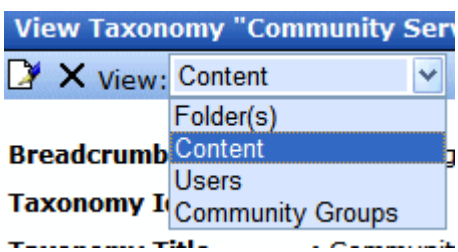
Task	How to initiate	For more information, see
Edit a taxonomy's fields (title, description, template, etc.)	Click Edit toolbar button ( ) or 1. Place cursor over the taxonomy/category. 2. Click **Edit Properties** from the popup menu.	"Use the following table to complete the screen." on page 648
Delete a taxonomy	Click Delete toolbar button ( )	"Deleting a Taxonomy from the View All Taxonomies Screen" on page 676
Export a taxonomy	Click Export Taxonomy toolbar button ( )	"Exporting a Taxonomy" on page 684
Add a taxonomy category	1. Select the taxonomy/category under which the new category should appear. 2. Click **Add** from the popup menu.	"Administrator-Based Taxonomy Assignment" on page 663
View a taxonomy category	1. Place the cursor over the taxonomy/category. 2. Click **View/Edit Items** from the popup menu.	
Change the order of items in a taxonomy/category	1. Place the cursor over the taxonomy/category. 2. Click **Reorder** from the popup menu.	"Change Order of Categories Assigned to a Taxonomy/Category" on page 681
Delete a category	1. Place the cursor over the taxonomy/category. 2. Click **Delete** from the popup menu.	"Deleting a Taxonomy from the View All Taxonomies Screen" on page 676
Assign content items to a category	1. Place the cursor over the taxonomy/category. 2. Click **Assign Item(s)** from the popup menu.	"Assigning a Taxonomy/Category to Content or Users" on page 657

Task	How to initiate	For more information, see
Assign folders to a category	1. Place the cursor over the taxonomy/category. 2. Click **Assign Folder(s)** from the popup menu.	"Assigning a Folder to a Taxonomy/ Category" on page 667

Viewing a Taxonomy or Category

To view any taxonomy or category, move the cursor over it then select **View/Edit Items** from the popup menu.

The View screen displays the taxonomy/category's information (title, description, image, template, etc.). The bottom of the screen shows assigned content items, folders, users, or community groups, depending on how the View dropdown is set.



From here, you can perform these tasks.

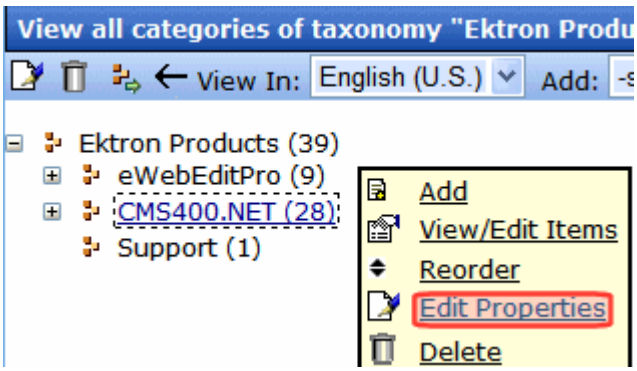
Task	Directions
Edit taxonomy/category fields (title, description, image, etc.)	See "Edit a Taxonomy/Category's Fields" on page 675.
Remove items (content, folders, users or community groups) from the taxonomy/category	See "Deleting a Category from the View All Categories of Taxonomy Screen" on page 676

Edit a Taxonomy/Category's Fields

To edit a Taxonomy's fields, follow these steps.

NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

1. From the Workarea, go to **Modules > Taxonomy**.
2. Click the taxonomy from the View All Taxonomies Screen.
3. Click the Edit button ( ) *or* hover the cursor over the taxonomy and select **Edit Properties** from the popup menu.



4. For a description of these fields, see "Use the following table to complete the screen." on page 648

See Also: "Applying a Template to a Taxonomy or Category" on page 651

Delete a Taxonomy/Category

There are two ways to delete a taxonomy or category.

- "Deleting a Taxonomy from the View All Taxonomies Screen" on page 676
- "Deleting a Category from the View All Categories of Taxonomy Screen" on page 676

After you delete a taxonomy, it can no longer be assigned to content and folders. Further, existing links to content (via the **Category** tab) are deleted. And, if the taxonomy was assigned to a folder (via the Folder Properties screen), it is no longer assigned.

See Also: "Deleting a Taxonomy in a Multi-Language Environment" on page 689

Deleting a Taxonomy from the View All Taxonomies Screen

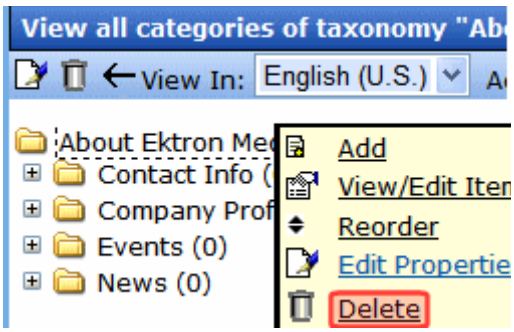
NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

1. From the Workarea, go to **Modules > Taxonomy**.
2. From the View All Taxonomies Screen, check the box to the left taxonomy you want to delete.
3. Click the delete button ( ).

NOTE The delete button does not appear if the language selector is set to **All**.

Deleting a Category from the View All Categories of Taxonomy Screen

1. From the Workarea, go to **Modules > Taxonomy**.
2. Select the taxonomy from the View All Taxonomies Screen.
3. Hover the cursor over the taxonomy or category and select **Delete** from the popup menu.



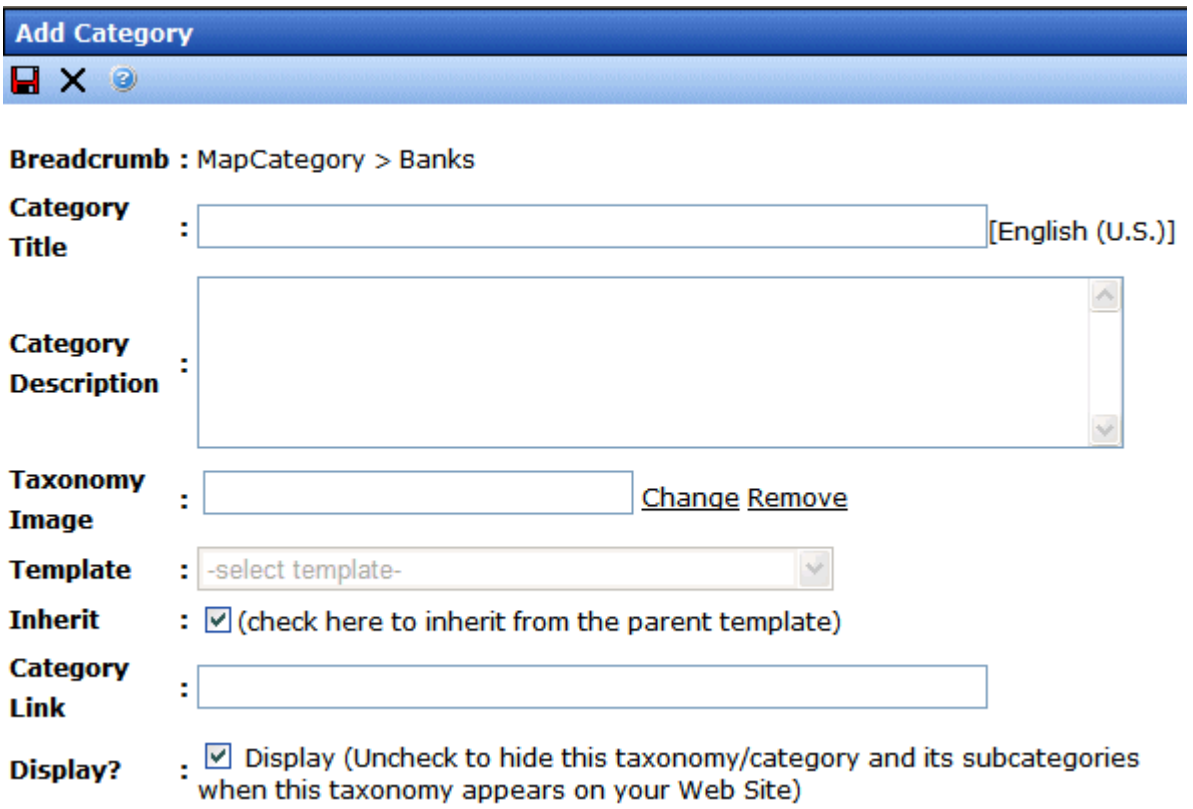
4. A confirmation message appears. Click **OK**.

Add a Category to a Taxonomy/Category

Follow these steps to add a category to a taxonomy, or to add a subcategory to a category.

NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

1. From the Workarea, go to **Modules > Taxonomy**.
2. Select a taxonomy from the View All Taxonomies Screen.
3. Select the taxonomy or category under which you want to create a new category.
4. Click **Add** from the popup menu.
5. The Add Category screen appears.


Add Category
Breadcrumb : MapCategory > Banks
Category Title :
[English (U.S.)]
Category Description :
Taxonomy Image :
Change Remove
Template :
-select template-
Inherit :
(check here to inherit from the parent template)
Category Link :
Display? :
Display (Uncheck to hide this taxonomy/category and its subcategories when this taxonomy appears on your Web Site)

6. Complete the fields for the new category. *See Also:* "Use the following table to complete the screen." on page 648
7. Click the Save button ( ).

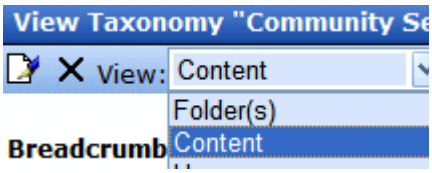
Remove Content from a Taxonomy/Category

NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

See Also: "Removing Content from a Multi-Language Taxonomy" on page 691

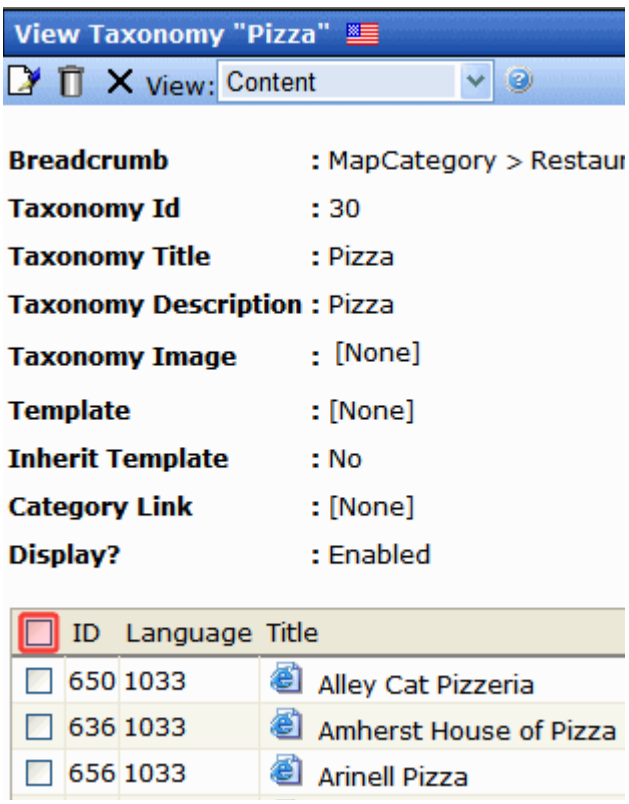
1. From the Workarea, go to **Modules > Taxonomy**.
2. Select a taxonomy from the View All Taxonomies Screen.

3. Select the taxonomy or category that has content that you want to edit.
4. Click **View/Edit Items** from the popup menu.
5. The View Taxonomy screen appears.
6. From the View dropdown, select **Content**.



7. Check the box to the left of content you want to remove.

TIP! To remove all content, check the box in the title bar.



8. Click the delete button ( ).

Remove Folder from a Taxonomy/Category

NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

- "Background Information" on page 680
- "Steps for Removing a Folder" on page 680
- "Removing Folders from a Multi-Language Taxonomy" on page 693

Background Information

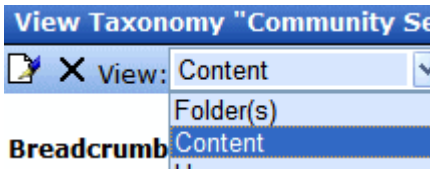
If you assign a folder to a taxonomy category, the internal relationship is between the folder's content and a taxonomy category. A folder is merely a convenience for creating this relationship. There is no data connection between a folder and a taxonomy category.

Therefore, if you delete a folder from a taxonomy category, all content in that folder remains assigned to it. To remove the folder's content from the category, see "Remove Content from a Taxonomy/Category" on page 678.

However, after deleting a folder, the connection between the folder and taxonomy category is broken. So, content subsequently added to the folder is not assigned to the taxonomy.

Steps for Removing a Folder

1. From the Workarea, go to **Modules > Taxonomy**.
2. Select a taxonomy from the View All Taxonomies Screen.
3. Select the taxonomy or category that has folder that you want to delete.
4. Click **View** from the popup menu.
5. The View Taxonomy screen appears.
6. From the View dropdown, select **Folder(s)**.



7. Check the box to the left of folders you want to remove.

TIP! To remove all folders, check the box in the title bar.

8. Click the delete button ( ).

Change Order of Categories Assigned to a Taxonomy/ Category

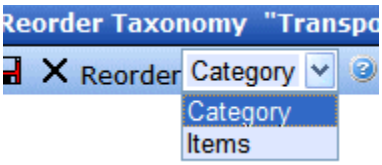
NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

You can reorder (that is, change the sequence of) the categories below a taxonomy or one of its categories. Reordered *subcategories* appear only within the **Ektron CMS400.NET** Workarea.

To reorder the categories assigned to a taxonomy or category, follow these steps.

See Also: "Reordering Categories in a Multi-Language Taxonomy" on page 694

1. From the Workarea, go to **Modules > Taxonomy**.
2. Select the taxonomy from the View All Taxonomies Screen.
3. Select the taxonomy or category that has content that you want to reorder.
4. Click **Reorder** from the popup menu.
5. Set the reorder pull-down list to **Category**.



6. Select an item that you want to move up or down.
7. Click the up or down arrow to move the item in that direction.
8. Continue steps 6 and 7 until all content is in the desired order.
9. If there are several language versions of this taxonomy, you can automatically reorder all versions. To do that, check **Apply ordering for all languages**.
10. Click the Save button ( ).

Change Order of Content Assigned to a Taxonomy/Category

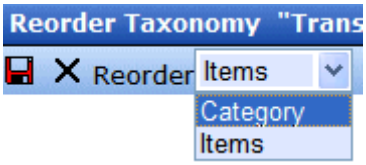
You can reorder (that is, change the sequence of) content within a category. Reordered *content* appears within the **Ektron CMS400.NET** Workarea and can appear on your Web site of the Directory server control's `ItemSortOrder` property is set to `taxonomy_item_display_order`.

See Also: "Reordering Content in a Multi-Language Taxonomy" on page 694

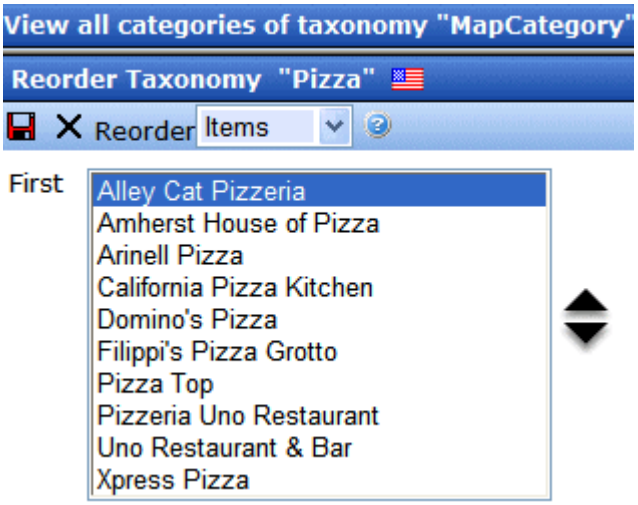
To reorder the content assigned to a category, follow these steps.

NOTE Only administrators or users to whom the Taxonomy-Administrator role has been assigned see the **Modules > Taxonomy** option. *See Also:* "Defining Roles" on page 795

1. From the Workarea, go to **Modules > Taxonomy**.
2. Select the taxonomy from the View All Taxonomies Screen.
3. Select the taxonomy or category that has content that you want to reorder.
4. Click **Reorder** from the popup menu.
5. Set the reorder pull-down list to **items**.



6. All items assigned to the category appear.



7. Select a content block that you want to move up or down.
8. Click the up or down arrow to move the item in that direction.
9. Continue steps 7 and 8 until all content is in the desired order.
10. Click the Save button ( ).

Importing and Exporting a Taxonomy

You can *export* any taxonomy as an xml file. Then, you can reuse it or send it to someone else, who would *import* it in order to bring a copy of it onto their computer.

You can use the Export/Import feature like a “save as” feature. For example, you want to create a taxonomy that is similar to an existing one but has some differences. The easiest way to do this is to export an existing one, import it under a new name, and edit it.

Below is an example of part of a taxonomy saved as an XML document.

```
<?xml version="1.0" ?>
- <TaxonomyData xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://
www.w3.org/2001/XMLSchema">
  <TaxonomyName>MapCategory</TaxonomyName>
  <TaxonomyDescription>map</TaxonomyDescription>
- <Taxonomy>
- <TaxonomyData>
  <TaxonomyName>Sports</TaxonomyName>
  <TaxonomyDescription>sports</TaxonomyDescription>
  </TaxonomyData>
- <TaxonomyData>
  <TaxonomyName>Banks</TaxonomyName>
  <TaxonomyDescription>Banks</TaxonomyDescription>
  </TaxonomyData>
- <TaxonomyData>
  <TaxonomyName>Pharmacies</TaxonomyName>
  <TaxonomyDescription>Pharmacies</TaxonomyDescription>
  </TaxonomyData>
- <TaxonomyData>
  <TaxonomyName>Travel</TaxonomyName>
  <TaxonomyDescription>Travel</TaxonomyDescription>
  </TaxonomyData>
- <TaxonomyData>
  <TaxonomyName>Restaurant</TaxonomyName>
  <TaxonomyDescription>Restaurant</TaxonomyDescription>
- <Taxonomy>
- <TaxonomyData>
  <TaxonomyName>American</TaxonomyName>
  <TaxonomyDescription>American</TaxonomyDescription>
  </TaxonomyData>
- <TaxonomyData>
  <TaxonomyName>Indian</TaxonomyName>
  <TaxonomyDescription>Indian</TaxonomyDescription>
  </TaxonomyData>
```

Exporting a Taxonomy

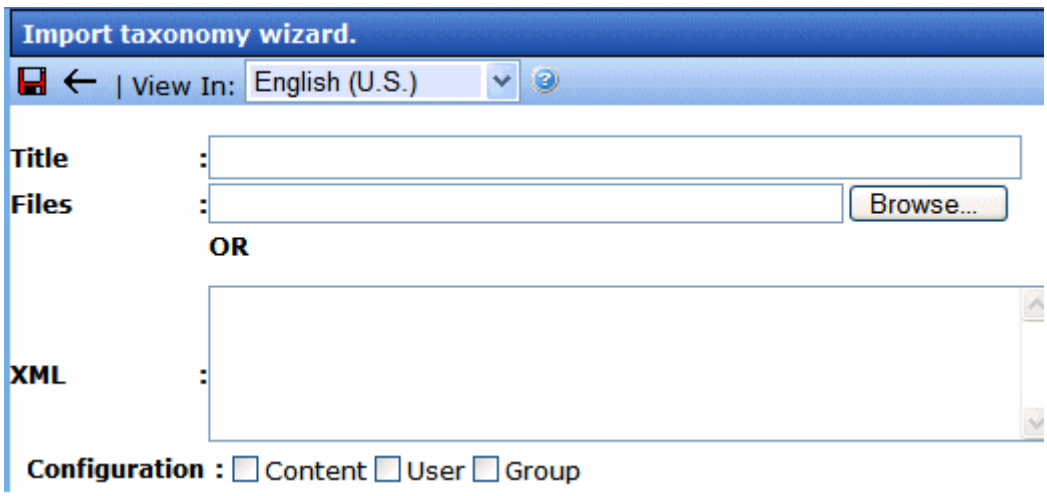
Exporting a taxonomy means saving it as an .xml file on your computer or network drive. To export a taxonomy, follow these steps.

1. From the Workarea, go to **Modules > Taxonomy**.
2. Select the language of the taxonomy that you want to export.
3. All taxonomies in that language appear.
4. Click a taxonomy that you want to export.

5. Click the Export Taxonomy button ( ).
6. You are prompted to select a folder into which to save it.

Importing a Taxonomy

1. From the Workarea, go to **Modules > Taxonomy**.
2. Click the Import Taxonomy button ( ).
3. The Import Taxonomy screen appears.



4. In the **Title** field, enter a name for your new taxonomy.
5. Click the **Browse** button.
6. Navigate to the taxonomy file you want to import.
7. The path appears in the **File** field.

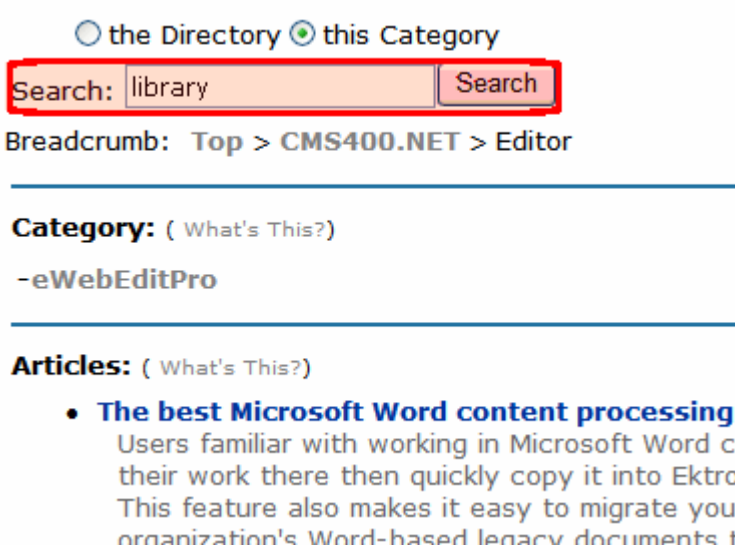
NOTE Alternatively, you can enter or paste the xml into the **XML** box.

8. Determine the taxonomy's configuration. See "Configuration" on page 650
9. Click the Save button ( ).

NOTE If you assign a name that is already given to a taxonomy, **Ektron CMS400.NET** appends a number to the title, beginning with 1.

Displaying a Content Item Taxonomy Search on your Web Site

When your Web developer places a Directory server control on a Web page, he can use the **Enable Search** property to include a Search box with the taxonomy display (circled below).


the Directory
this Category
Search:
library
Search
Breadcrumb: Top > CMS400.NET > Editor
Category: (What's This?)
-eWebEditPro
Articles: (What's This?)
The best Microsoft Word content processing
Users familiar with working in Microsoft Word c
their work there then quickly copy it into Ektro
This feature also makes it easy to migrate you

The box helps site visitors find content by returning only items that include a search phrase *and* are assigned to a selected category.

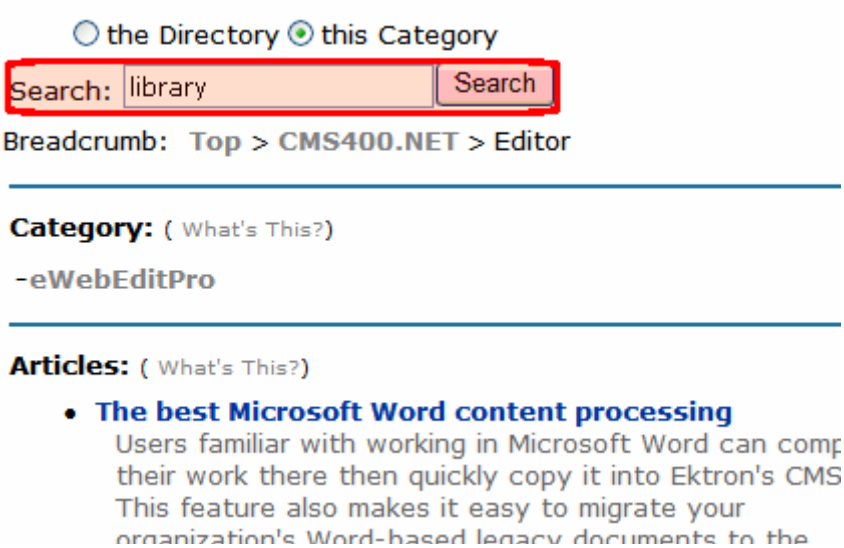
When placing a Directory server control, your Web developer defines a Taxonomy ID number. The ID determines the top level of the taxonomy that appears below the **Search** box, to the right of **Breadcrumb**. Below that are categories that exist directly below the Taxonomy ID.

Using the Taxonomy Search

To use the search, a site visitor enters a search term and clicks the **Directory** radio button (above the **Search** box). The screen may return links in two areas below **Breadcrumb**.

- **Category** - all *categories* below the selected level with content that includes the search term. Click a category to see a list of content that includes the search term in that taxonomy/ category level or one of its subcategories.
- **Articles** - content within the *currently selected* taxonomy/ category level that includes the search term

As illustrated below, within the **Editor** category, one *category* (**eWebEditPro**) includes content with the word **library**. And, one content block (**The best Microsoft Word content processing**) includes **library**.


the Directory
this Category
Search:
library
Search
Breadcrumb: Top > CMS400.NET > Editor
Category: (What's This?)
-eWebEditPro
Articles: (What's This?)
The best Microsoft Word content processing
Users familiar with working in Microsoft Word can comp
their work there then quickly copy it into Ektron's CMS
This feature also makes it easy to migrate your

Multi-Language Support for Taxonomies

This section explains of how Taxonomy is supported in a multi-language environment. It consists of the following topics.

- ”Creating a Taxonomy in a Multi-Language Environment” on page 688
- ”Deleting a Taxonomy in a Multi-Language Environment” on page 689
- ”Enabling/Disabling a Language in a Multi-Language Environment” on page 689

- ”Taxonomy Properties in a Multi-Language Environment” on page 690
- ”Assigning Content to a Multi-Language Taxonomy” on page 690
- ”Removing Content from a Multi-Language Taxonomy” on page 691
- ”How a Folder’s Taxonomy Properties are Affected by Multi-Language Support” on page 691
- ”Assigning Folders to a Multi-Language Taxonomy” on page 693
- ”Removing Folders from a Multi-Language Taxonomy” on page 693
- ”Reordering Content in a Multi-Language Taxonomy” on page 694
- ”Reordering Categories in a Multi-Language Taxonomy” on page 694

Creating a Taxonomy in a Multi-Language Environment

When you create a new taxonomy, you select a language. At that point, a version of that taxonomy is also created for each enabled language.

For example, you create a taxonomy in English, and French and Spanish are also enabled (in the **Settings > Language Settings** screen). **Ektron CMS400.NET** now has versions of that taxonomy in English, French, and Spanish. The ID of each taxonomy is the same, but the language ID is different. You do not need to use all language versions.

The three versions now linked and cannot be unlinked. So, for example if you assign a category to the English taxonomy, that category is also assigned to the French and Spanish versions. Of course, since the text is English, it will probably have to be translated. *See Also:* ”Using the Language Export Feature” on page 890

Upgrading and Multi-Language Taxonomy Support

As of version 7.6.5, any new taxonomies are synchronized. That is, if you create a taxonomy in English, one is created with the same

taxonomy ID but a different language ID in all other enabled languages. And, if you add categories to one language taxonomy, those categories are automatically added to the other language versions of that taxonomy.

Previously, CMS400.NET allowed multiple language versions of a taxonomy, but changes to one language did not affect the language-related versions. If your Ektron CMS400.NET has such versions, the 7.6.5 upgrade does not synchronize your taxonomy. Furthermore, no additional versions of that taxonomy will be created in other enabled languages. Ektron assumes that, since taxonomies in those languages already exist, you want to keep them as they are. So, for example, assume you created a taxonomy in a previous version of Ektron CMS400.NET in English and Spanish. The upgrade does not synchronize them.

Enabling Taxonomy Synchronization for Taxonomies that Existed Prior to 7.6.5 Upgrade

Suppose that, after the 7.6.5 upgrade, you want to transform an unsynchronized taxonomy to a synchronized multi-language taxonomy, so that changes to one are automatically reflected in the others. To accomplish this, upgrade to 7.6.5 and delete the Spanish version. At that point, a version of that taxonomy will be created for every enabled language and synchronized with the English version. You now have the option of translating category names manually or exporting the taxonomy, translating it and then importing back in. *See Also:* "Using the Language Export Feature" on page 890

Deleting a Taxonomy in a Multi-Language Environment

If you delete a taxonomy, all related language versions are also deleted.

Enabling/Disabling a Language in a Multi-Language Environment

If you enable a new Workarea language, a version of every taxonomy created in version 7.6.5 and above is automatically created in that language.

If you disable a language, all of its taxonomies are deleted.

See Also: "Determining Which Languages are Available" on page 880

Taxonomy Properties in a Multi-Language Environment

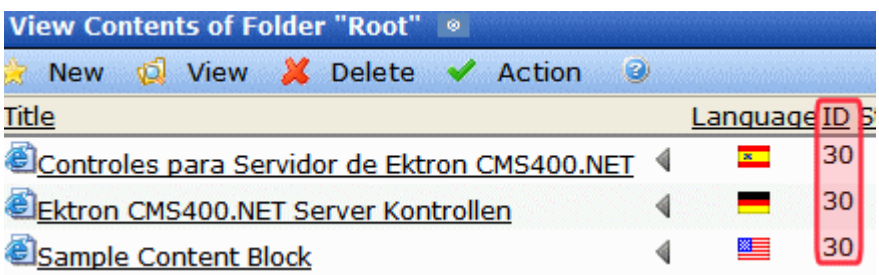
Initially, all related-language versions of a taxonomy take their properties from the original language version. For example, if you create a taxonomy in English and French is also enabled, the French Taxonomy description is the same as the English one, as are the taxonomy image, taxonomy template, value of **Display?** checkbox, etc.

However, after the initial creation of the multiple-language versions, changes to taxonomy properties affect the current language only -- they do not affect the related-language versions.

Exception - When you edit the taxonomy **Display?** property, you are prompted to apply the change to all languages *or* the current language only. *See Also:* "Display?" on page 650

Assigning Content to a Multi-Language Taxonomy

As explained in "Multi-Language Support" on page 876, **Ektron CMS400.NET** supports multiple language versions of content, as shown below.



As you can see, Content ID=30 exists in English, Spanish and German.

When applying content to a taxonomy category, you can only apply content whose language matches the taxonomy language. If that content exists in other languages, the related-language version is also applied to the related-language taxonomy.

So, to continue the above example, assume there is a taxonomy in English and you apply content item ID=30, **Sample Content Block** to one of its categories. If that taxonomy exists in German, the content block titled **Ektron CMS400.NET Server Kontrollen** (also ID=30) is applied to the corresponding category in the related German taxonomy.

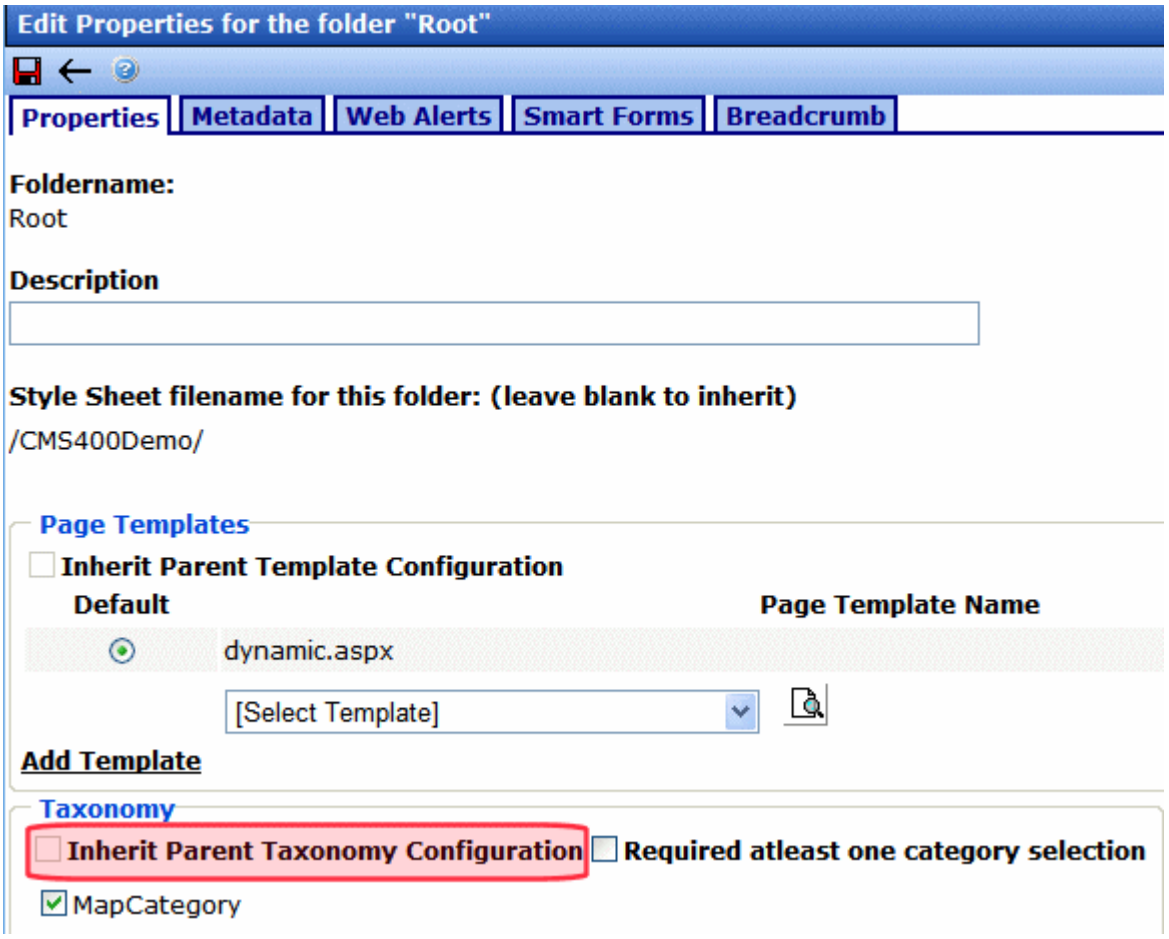
If there is no corresponding German content, nothing is applied to the German taxonomy category.

Removing Content from a Multi-Language Taxonomy

If you remove content from a taxonomy in any language, it is removed from all language-related taxonomies.

How a Folder's Taxonomy Properties are Affected by Multi-Language Support

If there are several language-related versions of a taxonomy and you select one of them then edit a folder's taxonomy properties, content in the related language inherits the taxonomy folder properties.



For example, assume I select English, then edit a folder's taxonomy properties and apply taxonomy categories. *See Also:* "Assigning Taxonomies to a Folder" on page 661

If I later edit French content in that folder, the corresponding French taxonomy's categories are available to be assigned via the **Category** tab.

Further, the value of the **At least one category is Required** check box is also inherited. This means that if a category must be applied to English content, it is also required for French content.

Assigning Folders to a Multi-Language Taxonomy

When you assign a folder to a taxonomy category, you indicate that all folder content is assigned to that node. **Ektron CMS400.NET** folders are language-neutral, so the folder is also applied to the corresponding taxonomy category in every language. However, only folder content that matches the taxonomy's language is assigned to the taxonomy category.

So, for example, a folder has three content blocks.

Language	Content in folder in this language
English	• 100 • 101 • 102
German	• 100

If you apply that folder to a taxonomy, the English version of the taxonomy has three content blocks assigned, but the German version only gets one content block (ID 100).

If content is later added to the folder, new English content is assigned to the English taxonomy, and new German content is assigned to the German taxonomy.

TIP! If you apply a folder to a taxonomy, numbers on the View Taxonomy screen indicate how many content items are applied to it. Unless you have the same number of content items in each language, this number is different for every language.

Removing Folders from a Multi-Language Taxonomy

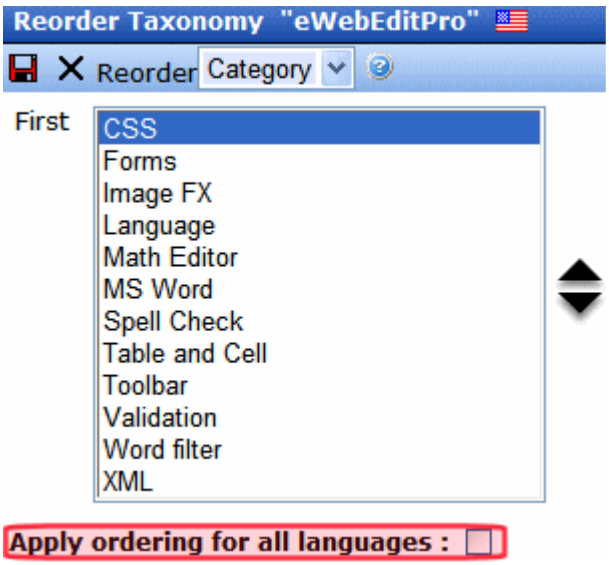
As explained in "Background Information" on page 680, if you remove a folder from its assignment to a taxonomy category, the content in that folder is still applied. So, you must also remove all of its content, as described in "Removing Content from a Multi-Language Taxonomy" on page 691.

Reordering Content in a Multi-Language Taxonomy

If you reorder the content assigned to a taxonomy category, there is no change to corresponding categories in other languages. This is because there is no guarantee that content that exists in one language exists in the other languages.

Reordering Categories in a Multi-Language Taxonomy

If you reorder categories assigned to a Taxonomy/Category, you have the option of applying the changes to all language-related categories (see below).



Using Taxonomies with Social Networking

If you have a community or social networking Web site, you can assign users and community groups to a taxonomy. This allows site visitors to search for users and groups by category.

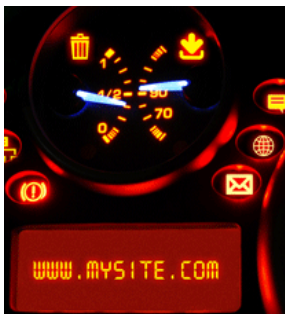
To enable a taxonomy-based search of users and community groups, a developer uses the following server controls on your site.

- **CommunityGroupBrowser control** - lets a site visitor browse a taxonomy category for community groups
- **CommunitySearch control** - lets a site visitor search for users and community groups based on selected criteria

See Also: The Developer Manual section “Introduction to Server Controls” > “Community Platform Server Controls” > “CommunityGroupBrowser Server Control” and “CommunitySearch Server Control.”

NOTE To see a comparison of taxonomy with other list options available with Ektron CMS400.NET, see the User Manual section “Web Site Navigation Aids” > “Working with Collections” > “Comparison of Collections, Menus, Taxonomy, and the List Summary Features.”

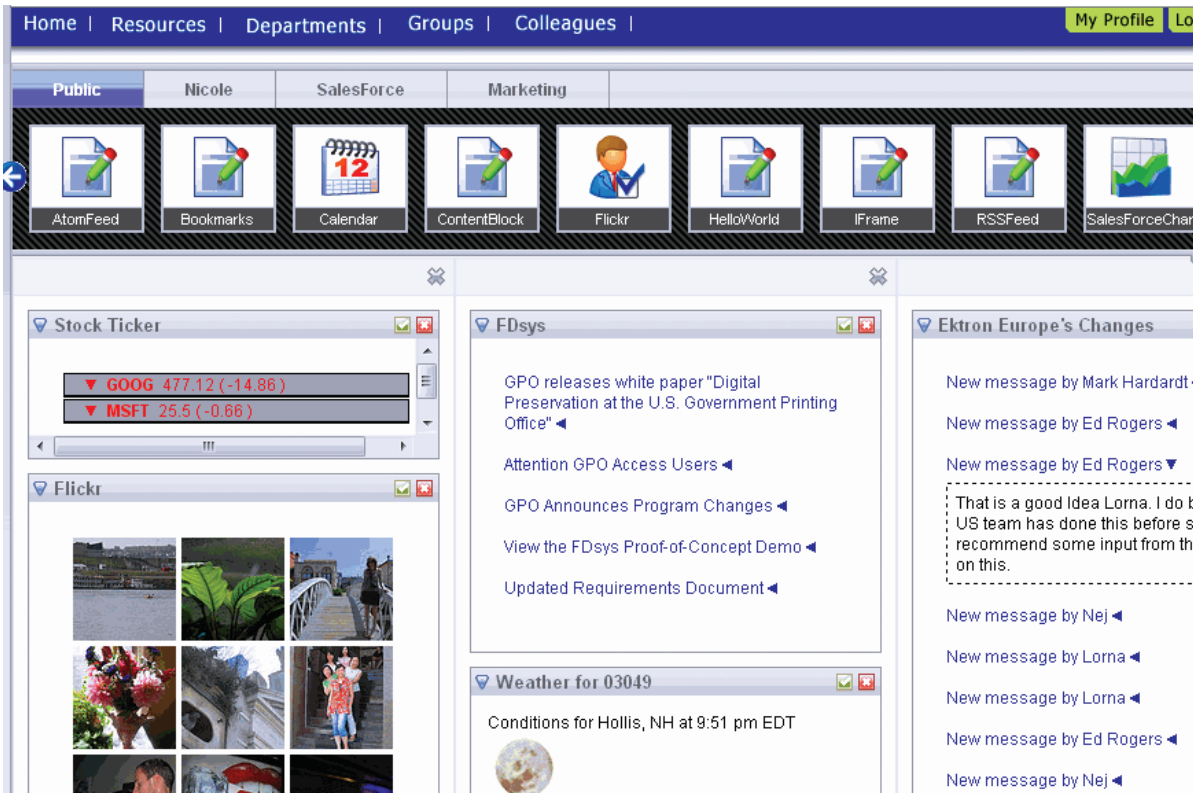
Personalizing a Web Page



Personalization is fast becoming an integral part of Web sites like iGoogle and Facebook, and organizations see personalization as a way to make their sites stickier and more engaging.

The following video introduces Personalization : http://www.ektron.com/personalization/

Ektron CMS400.NET provides tools to let membership users personalize their experience on your site, bringing relevant information to their fingertips. By letting users add widgets, applications, and feeds to a Web site, CMS400.NET provides a framework on which to easily build true, personalized portals.



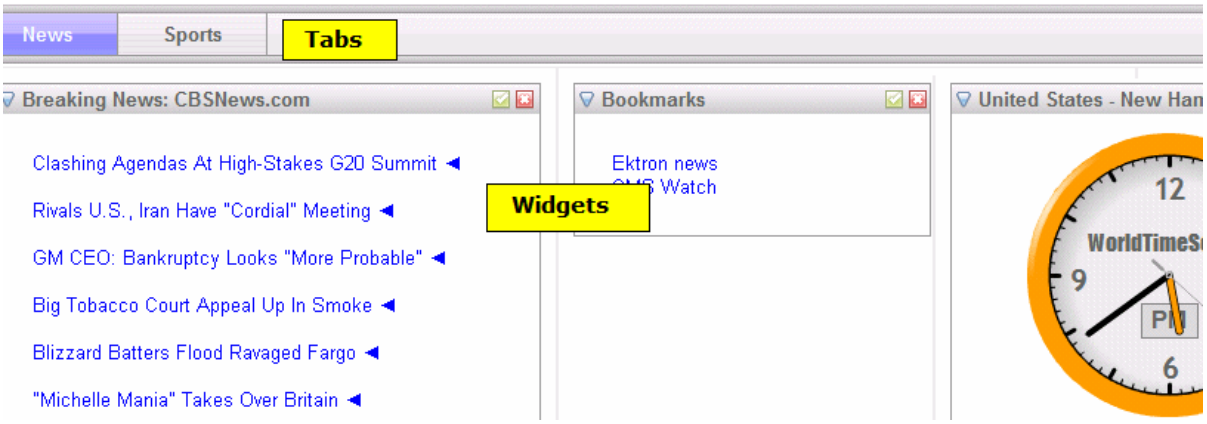
Make Your Site, Their Site with CMS400.NET

When membership users can choose and organize content on their digital dashboard, your site becomes their site. Everyone has different needs and preferences, and CMS400.NET's portal functionality lets you create a more interactive, engaging experience by giving power to the user.

How Personalization Works

On an **Ektron CMS400.NET** Web site, personalized areas can have multiple tabs, letting users organize content by subject – think of tabbed browsing. Users can easily add new tabs, switch between them, and define each one as public or private. For example, a tab that displays personal financial information can be private, so only that user can see it. Each tab can have multiple columns, to further customize the view.

Ektron CMS400.NET *widgets* can be dragged and dropped into each tab. These widgets can range from RSS feeds to applets to Ektron server controls. They make it possible for a site visitor to access all information from one location, rather than using many mouse clicks to log into separate Web sites or applications.



Developers can give users access to any pre-built **Ektron CMS400.NET** widgets, and even build their own widgets that talk to third-party systems to customize the way site visitors are engaged. *See Also:* "Creating Your Own Widgets" and "Standard Widgets" in the Ektron PageBuilder Quick Start Guide.

Empower your Intranet ...

Building personalization into your intranet empowers employees with customization that fits their work and personal life. Widgets can range from photos, local weather, and updated news to a personal work calendar, a sales timeline and tracker, or a feed to a discussion board about a new product release.

Managers can use widgets to enhance their access to their team's information. A human resources department can update job postings on a weekly basis via a widget rather than navigating to the company's careers site.

… and Public Facing Web Sites

Personalization revolutionizes the way visitors interact with sites, and **Ektron CMS400.NET** provides the tools to make that happen. See what some organizations can do with personalization.

- Healthcare portals have regular site visitors who desire the same information each time they visit. Enable visitors to receive allergy, fitness, nutrition, and appointment information whenever they log in – your site visitors may even save recipes to their nutrition tab.
- Clothing store customers are fashion-minded individuals who like to view the latest styles on these Web sites. Let them view the department they always go to first with the click of a button. Clothing widgets can show what's available in their size. This personalization will increase site traffic and sales.
- Banking sites can allow users to access personal account widgets, and separate it from their business financial information. Calculator widgets can keep them on the site as they make financial decisions.
- Schools personalize their Web site for each student and parent. Personalized portals let students have widgets such as school e-mail, personalized school calendars (with their homework, project due dates and social events), feeds linked directly to their grades, a school library search tool, and more to keep them connected and informed.

Personalization enables membership users to access information they want with the click of a button. No longer do they have to navigate all over a Web site (or sites) to find content. **Ektron CMS400.NET**'s personalization functionality lets organizations create iGoogle-like interfaces integrated within content management, so that they can serve their customers and members in a more powerful and personal way, building user adoption and increasing site traffic.

The following topics explain personalization in more detail.

- ”Personalization versus Pagebuilder Pages” on page 700
- ”Sample Personalization Pages” on page 701
- ”Creating an Individual Personalization Page” on page 701

- "How a Membership User Interacts with an Individual Personalization Page" on page 706
- "Creating a Community Group Personalization Page" on page 709
- "How a User Interacts with a Community Group Personalization Page" on page 711

Personalization versus Pagebuilder Pages

Personalization lets a *membership user* or *community group member* customize a single page on your site for their own use. A Pagebuilder page, on the other hand, lets an **Ektron CMS400.NET** *user* create pages that make up your Web site.

Both page types use widgets. Widgets are described in the PageBuilder Quick Start Guide.

Individual versus Group Personalization Pages

An *individual* personalization page is used by a membership or an **Ektron CMS400.NET** user to personalize a page on your Web site. A page consists of tabs, and each tab can contain several widgets.

If a tab is *private*, only that user can view and edit it. If the tab is *public*, anyone can view it but only the signed-in user can create and edit the content.

A *group* personalization page is used by group members to set up a portal page that addresses that group's unique needs. Any group member can view and create or edit the page's content.

If a tab on a group page is *private*, only group members can view and create or edit it. If the tab is *public*, anyone can view it but only the group members can create and edit the content.

Sample Personalization Pages

You can find examples of personalization pages in these Ektron sample sites. You can copy and edit the samples as needed to build your personalization pages.

To download sample sites, go to http://www.ektron.com/solutions/startersites/.

Individual Personalization Pages

- Technology site > Login > My Profile > Dashboard
- Intranet Site > Login > My Profile > Dashboard
- Developer Sample site > Personalization

Group Personalization Pages

- Technology site > Login > Community > Community Groups > *select group, such as Ektron Tech Web Design* > Dashboard
- Intranet Site > Login > Groups > *select group* > Dashboard

Creating an Individual Personalization Page

Follow these steps to create a personalization page from scratch. After you create the page, place a link to it on your site. Then, any authenticated membership user can use the page to create his own personal portal.

This section consists of the following subtopics.

- "Widget Spaces" on page 702
- "Steps for Creating a Personalization Page" on page 702

- "Verify that the User is Authenticated" on page 705

Widget Spaces

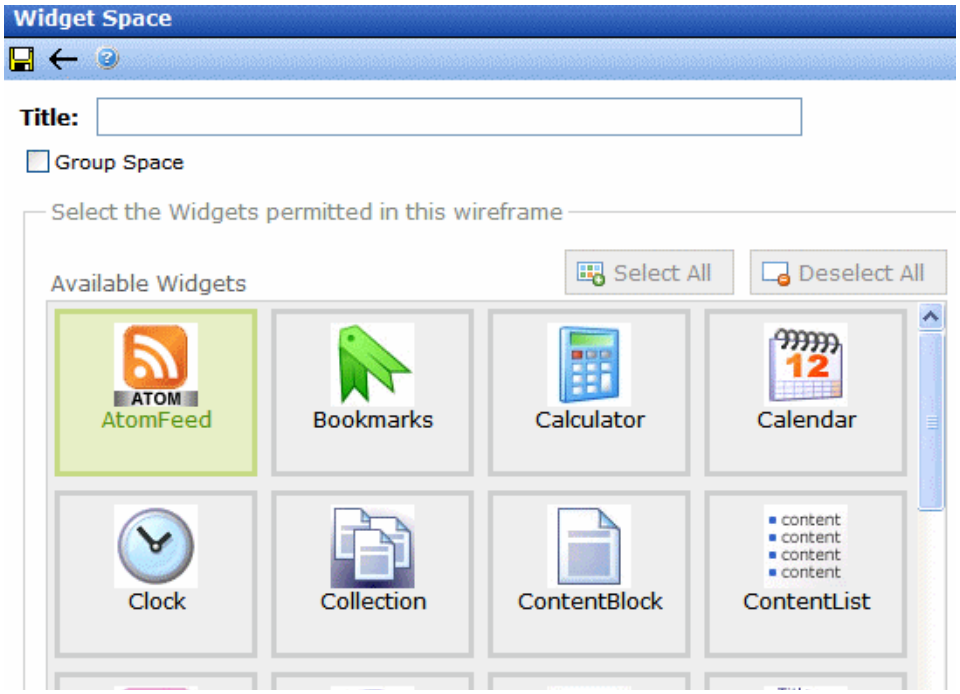
A widget space is a mechanism that lets you determine which widgets individual users or a community group can drop onto a personalization page.

For example, one group of users should only be allowed to drop weather and news feed widgets onto their personalization page. In this case, you would

- Create a widget space.
- Select only weather and news feed widgets.
- Sign on to Visual Studio to create the .aspx page.
- Drop a Personalization user control onto the page.
- In the control's `widgetspaceID` property, identify the widget space you created in bullet 1.

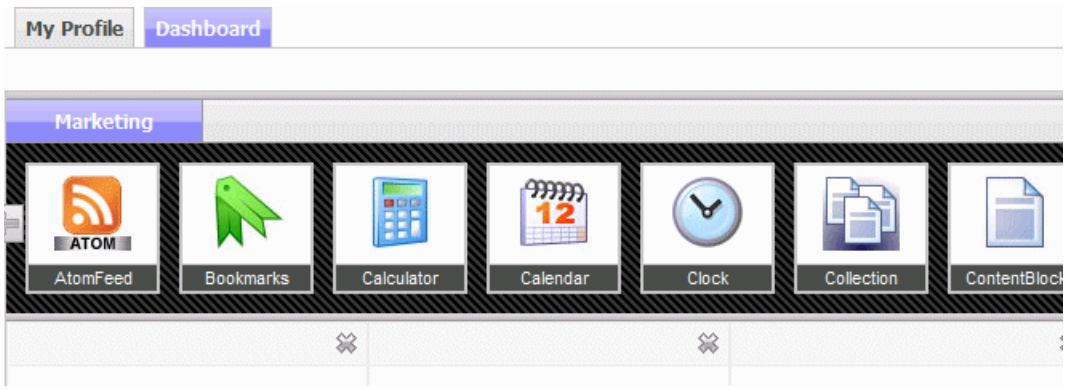
Steps for Creating a Personalization Page

1. Go to **Ektron CMS400.NET Workarea > Settings > Configuration > Personalization > Widgets**. Widgets are described in the PageBuilder Quick Start Guide.
2. Click the Sync button (make sure all widgets are available.
3. Go to **Settings > Configuration > Personalization > Widget Space**.
4. Click the add button ( ).
5. Enter a **Title**.
6. Only check the **Group Space** checkbox if this widget space will be used for a community group personalization page.
7. Select widgets that authorized users will be able to drop onto a page.



As you select a widget, its background color changes.

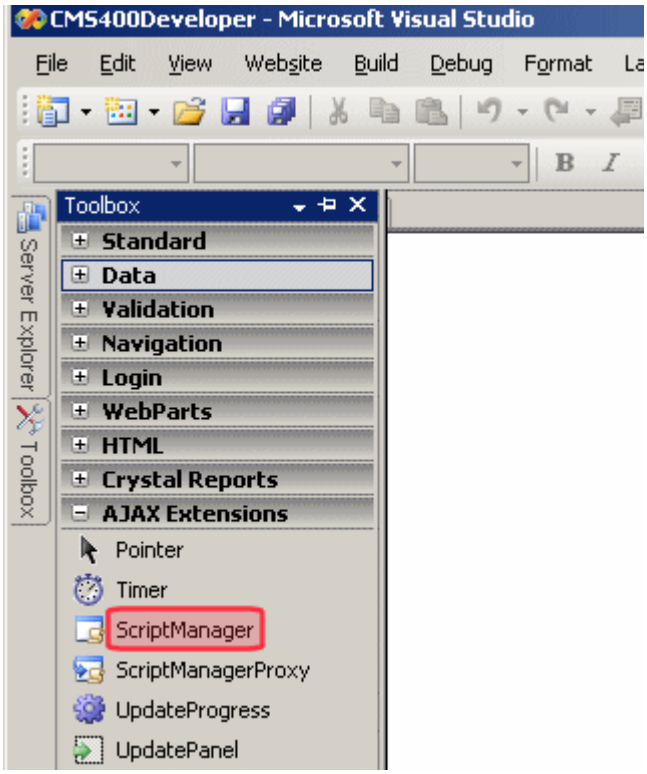
These widgets appear in the personalization screen's widget tray (shown below) when a membership user is personalizing a page.



8. Click the Save button ( ).

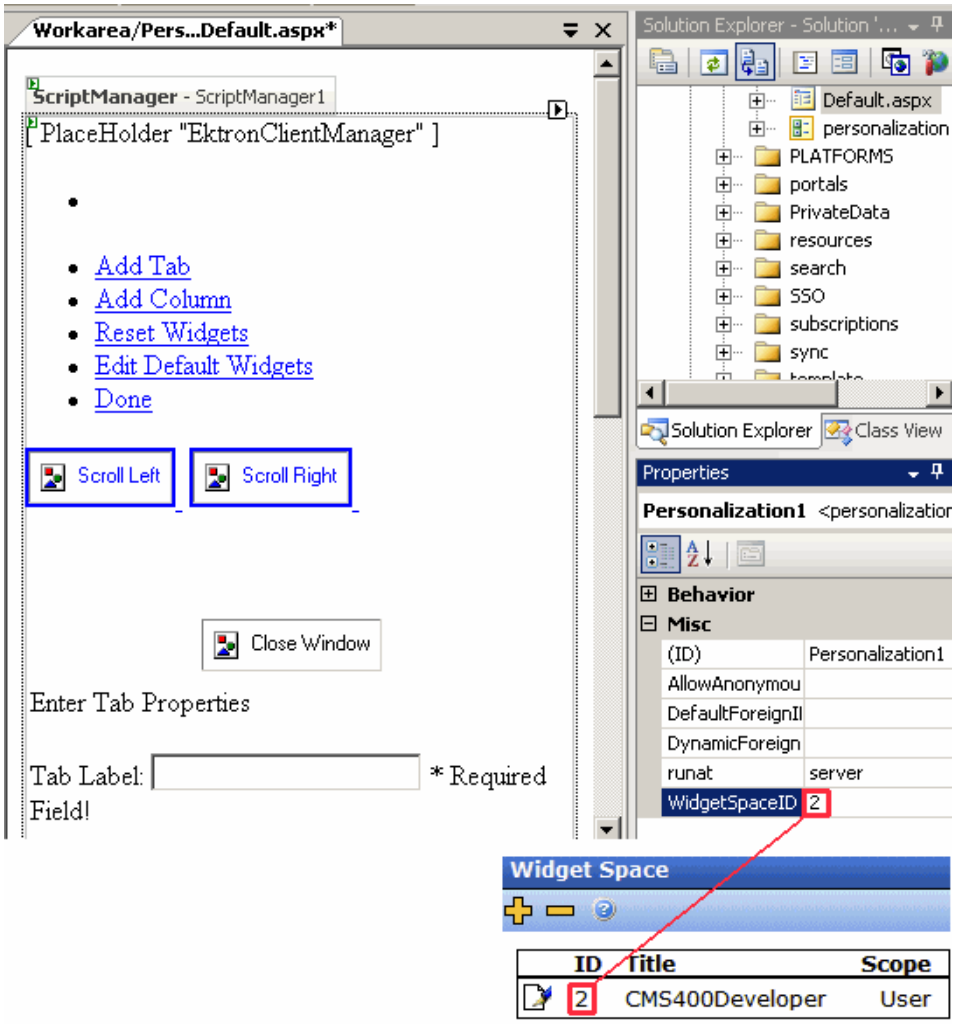
NOTE Remember your widget space's ID number. You need it when setting up the Personalization user control.

9. Open Visual Studio.
10. Create a new Web Form.
11. Switch to design view.
12. From the Toolbox, drag and drop an **Ajax Extensions > Script Manager** control.



If you do not see a Script Manager control, install the Microsoft AJAX Library 3.5. To do this, go to http://www.asp.net/ajax/downloads/.

13. In the Visual Studio folder browser, open the `workarea/personalization/` folder.
14. Drag and drop a Personalization user control (personalization.ascx).
15. Set the control's `widgetspaceid` property (circled below) to the ID number of the widget space you added in Step 6.



16. Save the Web Form.

Verify that the User is Authenticated

Your page should redirect the user to the personalization page, or use an ASP.NET panel to verify that user is authenticated.

NOTE The asp.net panels are implemented in eintranet and ektrontech site.

Here is sample code you can use.

Aspx.cs

```
// To check if user is logged in or not
Ektron.Cms.CommonApi IsUserLoggedIn = new Ektron.Cms.CommonApi();
if (IsUserLoggedIn.IsLoggedIn)
{
Response.Redirect(“dashboard.aspx”);
Or
pnlDashboard.Visible= true;
}
Else
{
pnlDashboard.Visible=false;
}
```

Aspx

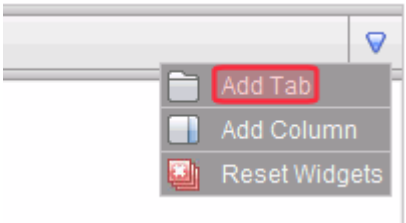
```
<asp:Panel ID="pnlDashboard" runat="server" Visible="False">
<asp:ScriptManager ID="ScriptManager1" runat="server" EnablePartialRendering="true"></
asp:ScriptManager>
<ucEktron:Personalization ID="widgetSpace" WidgetSpaceID="1" DynamicForeignIDParameter="id"
runat="server" />
</asp:Panel>
```

How a Membership User Interacts with an Individual Personalization Page

To access a personalization page, a membership user logs in then clicks **My profile > Dashboard**. Initially, the dashboard looks like this.

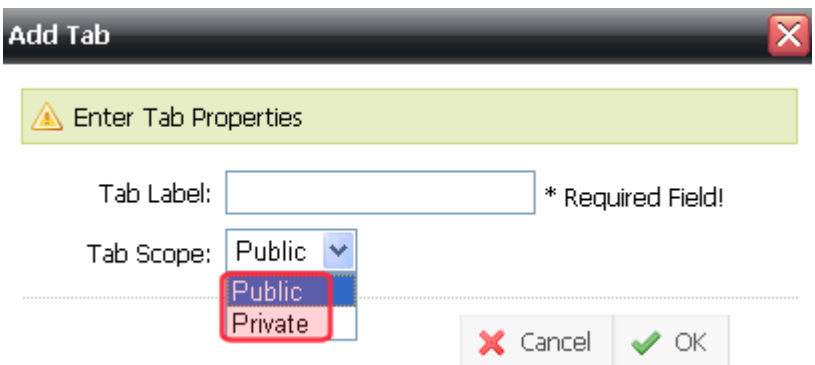
Inserting a Tab and Column

The user must first add a tab by clicking the down arrow circled above and choosing **Add Tab**.



Public vs. Private Tab

When creating a tab, the user must decide if it is *public* or *private*.

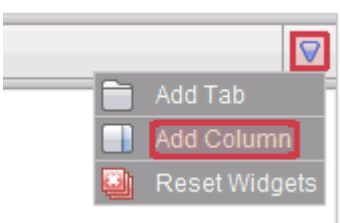


Any logged-in user can see a user's *public* tab by visiting his profile and clicking **Dashboard**.

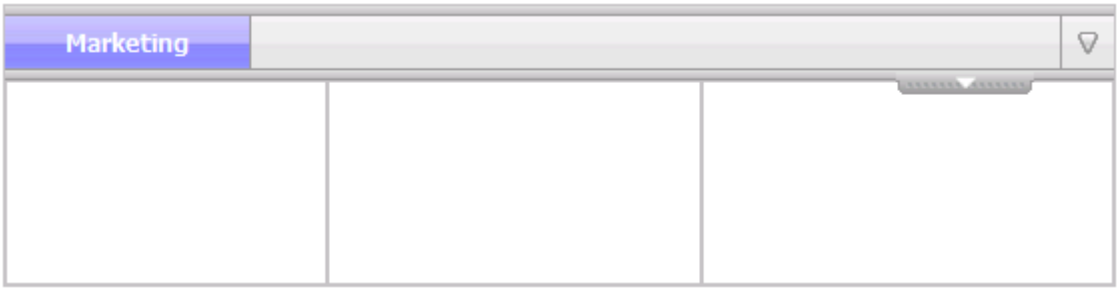
A *private* tab is only visible to the user who created it.

Adding Columns

Next, the user must add at least one column. To do this, he clicks the down arrow circled below and chooses **Add Column**.

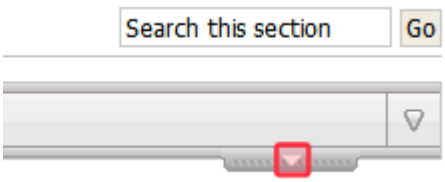


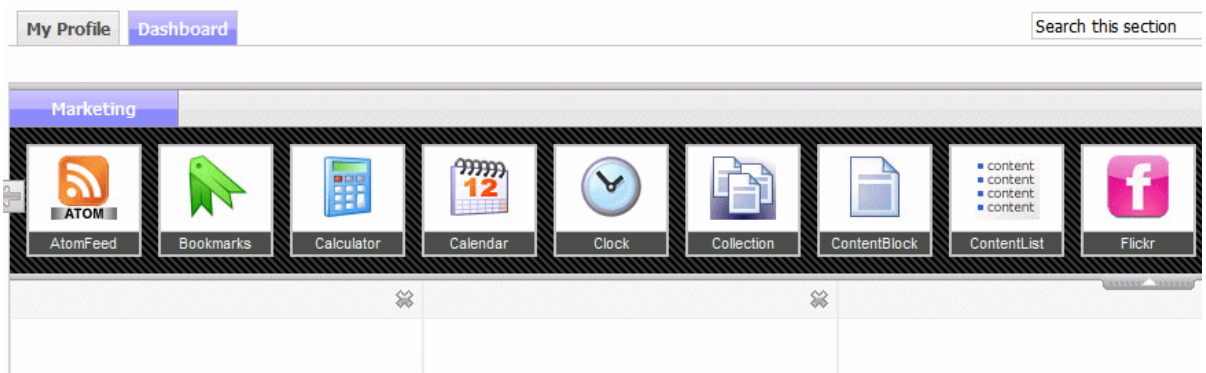
Here is an example of a tab with three columns.



Adding Widgets

To add a widget, the user clicks the other down arrow (circled below), then drags and drops the desired widgets.





The selection of widgets was determined when the widget space was created. *See Also:* ”Creating an Individual Personalization Page” on page 701.

Creating a Community Group Personalization Page

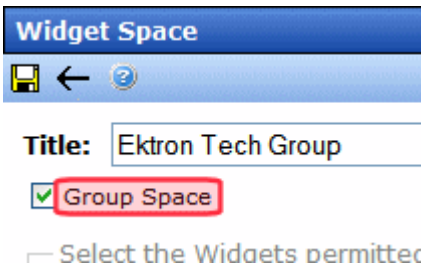
A community group personalization page is similar to an individual page. It lets group members customize a page's content by dropping widgets. For an introduction to these concepts, see

- "Personalizing a Web Page" on page 696
- "Individual versus Group Personalization Pages" on page 700
- "Sample Personalization Pages" on page 701
- "Creating an Individual Personalization Page" on page 701
- "How a Membership User Interacts with an Individual Personalization Page" on page 706.

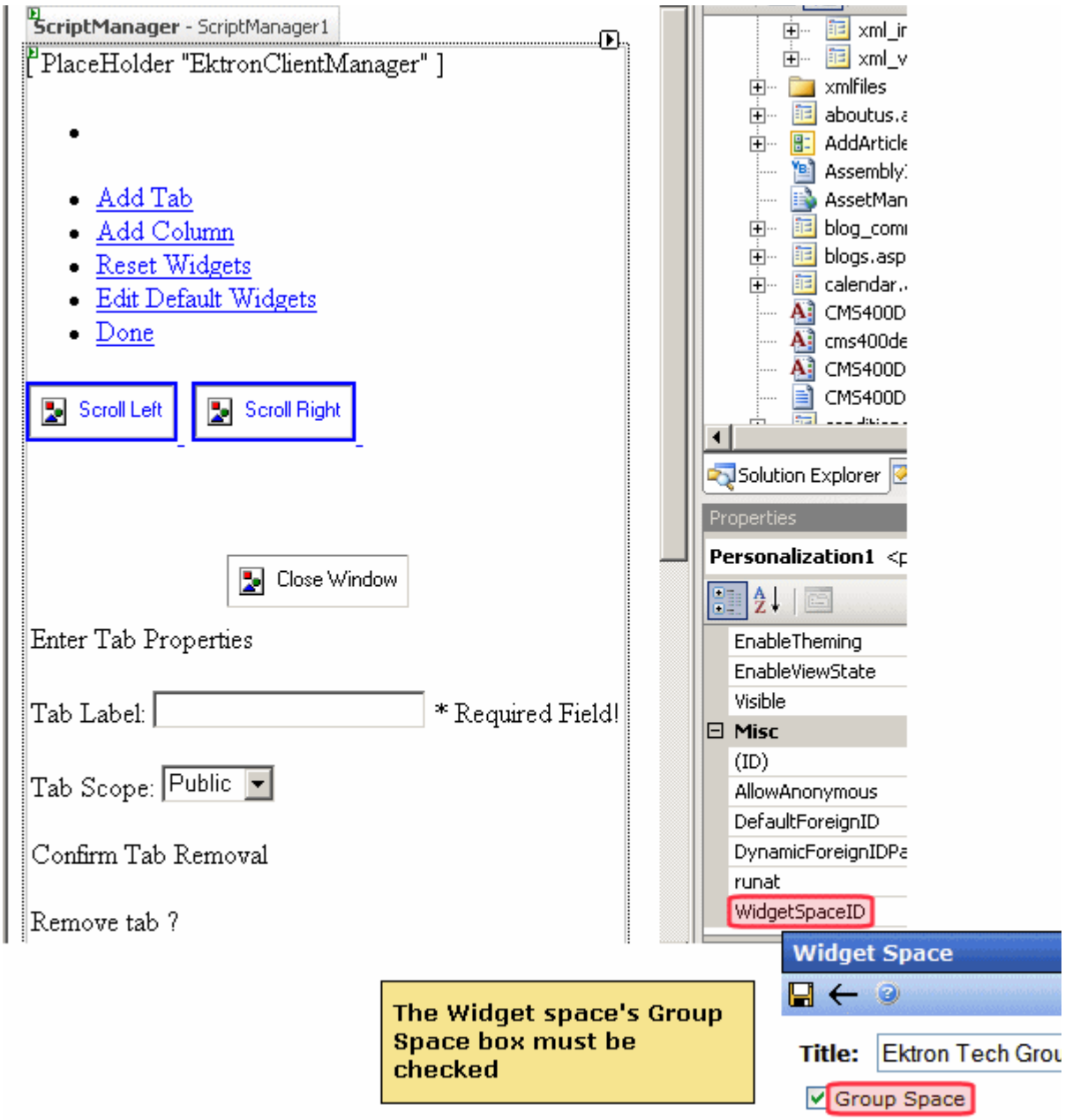
Setting up a Community Group Personalization Page

To create a Community Group personalization page, follow the instructions in "Creating an Individual Personalization Page" on page 701, with the following differences

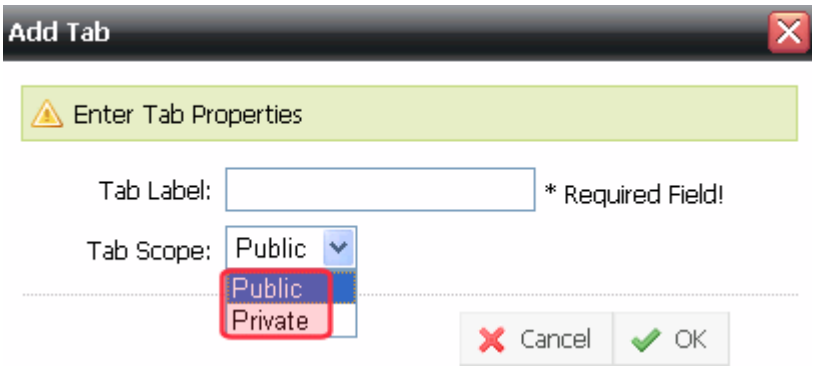
- When creating a Widget space, check the **Group Space** checkbox.



- When a developer creates an .aspx page and drops a personalization control, the selected Widget space must be one whose **Group Space** box is checked.



- A private tab is visible only to *group* members.



How a User Interacts with a Community Group Personalization Page

To access a Community Group personalization page, a membership or **Ektron CMS400.NET** user group member logs in then navigates to the group's personalization page. *See Also:* "Group Personalization Pages" on page 701

Initially, a group personalization page looks like this.

Community group members work with a personalization page in the same way they work with individual personalization pages. See "Inserting a Tab and Column" on page 706 and "Adding Widgets" on page 708.

Menu Feature

Ektron CMS400.NET's Menu feature lets users create and maintain a dropdown menu navigation system for your Web site. Like Collections, the Menu feature gives you the flexibility to display links to content, library assets, external hyperlink and submenus.

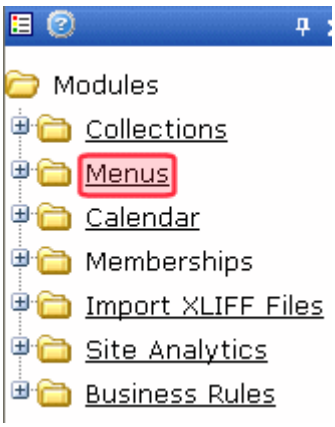
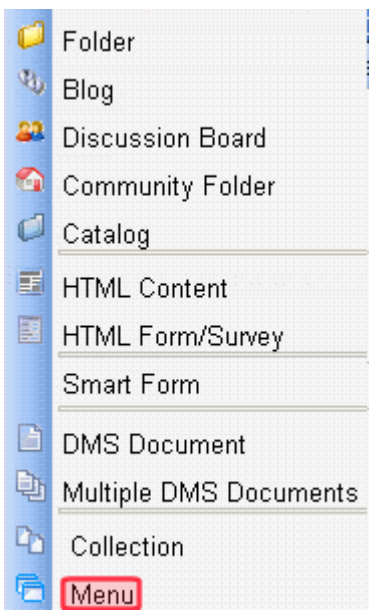
This section only describes managing permissions to use the Menus Feature, suggestions for implementing it, and how folder associations work.For more information about using the Menus feature, see the **Ektron CMS400.NET** User Manual section "Working with Menus."

See Also:

- "Permission to Use the Menus Feature" on page 712
- "Implementation of the Menus Feature" on page 714
- **Ektron CMS400.NET** User Manual > 'Web Site Navigation Aids" > "Working with Menus"

Permission to Use the Menus Feature

There are two ways to create a menu. Each has its own permission model.

Menu Creation Method	Illustration	How to set permissions
Via the Workarea's Modules tab		The user must be one of the following. • a member of the Administrators user group • assigned the Collection and Menu Admin role. *See Also:* "Defining Roles" on page 795 • granted permissions to Collections for the root folder. This is advanced permission. *See Also:* "Setting Permissions through the Permissions Table" on page 776
Via the View Contents of Folder screen's New > Menu option		See "Permissions for Menus Created from the View Contents of Folder Screen" on page 713

Permissions for Menus Created from the View Contents of

Folder Screen

Only users with permission to use the Collections feature (illustrated below) for a folder can work with menus. If user does not have permission to Collections, the **Menu** option does not appear on the **New** menu.

Also, if a user has permission to Collections but Read Only permission for content and the library, he cannot add content from a navigation link.

Implementation of the Menus Feature

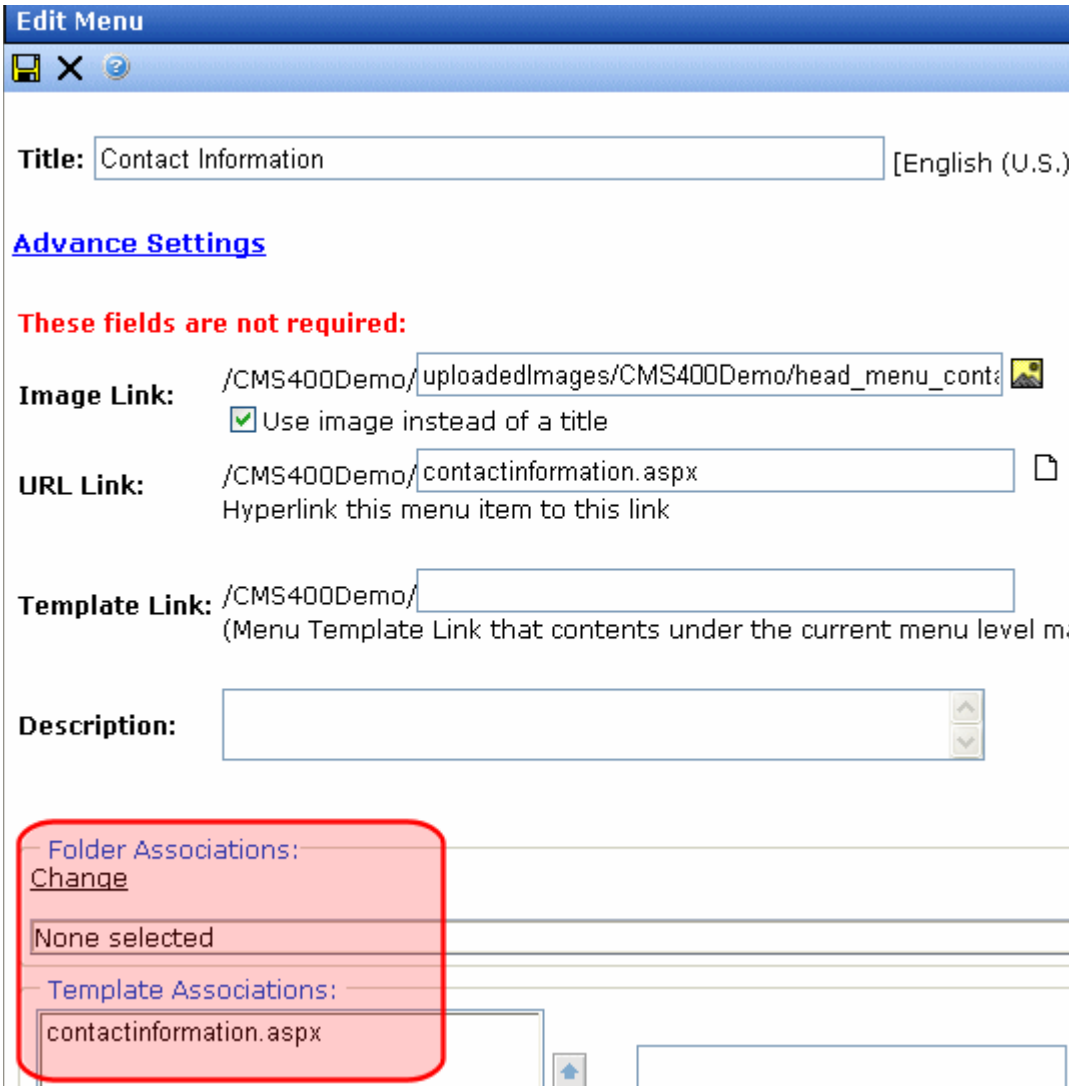
In order for a menu to appear on your Web site, your Web developer must modify a page template to display it. This procedure is described in the **Ektron CMS400.NET** Developer Manual sections “Ektron CMS400.NET Server Controls” > “List of Server Controls” > “Menu Server Control”, “Smart Menu Server Control”, and “DhtmlMenu Server Control.”

See Also:

- ”Assigning Folders or Templates to a Menu” on page 715
- ”Effect of Assigning a Folder to a Menu” on page 716
- ”Effect of Assigning a Template to a Menu” on page 718

Assigning Folders or Templates to a Menu

The Advanced Settings on the Edit Menu screen has **Folder Associations** and **Template Associations** sections (see image below). Any folders or templates currently assigned to the menu appear. You can use this section of the screen to add new templates/folders or remove existing ones.



For more information, see

- "Effect of Assigning a Folder to a Menu" on page 716

- ”Effect of Assigning a Template to a Menu” on page 718

Effect of Assigning a Folder to a Menu

If

- you assign a folder to a menu

  and

- a user navigates to any content item that resides in the folder

  and

- a Smart Menu whose `EnableSmartOpen` property is **true** appears on the screen

the Smart Menu automatically displays the items on the associated submenu.

NOTE Navigation to the content item can consist of clicking a quicklink, a menu option, a list summary item, the result of a search, etc.

In effect, you are instructing **Ektron CMS400.NET** to expose a menu whenever a content item that resides in one or more selected folders appears on the screen. As a result, a user who begins looking for a specific content item sees similar items on the screen.

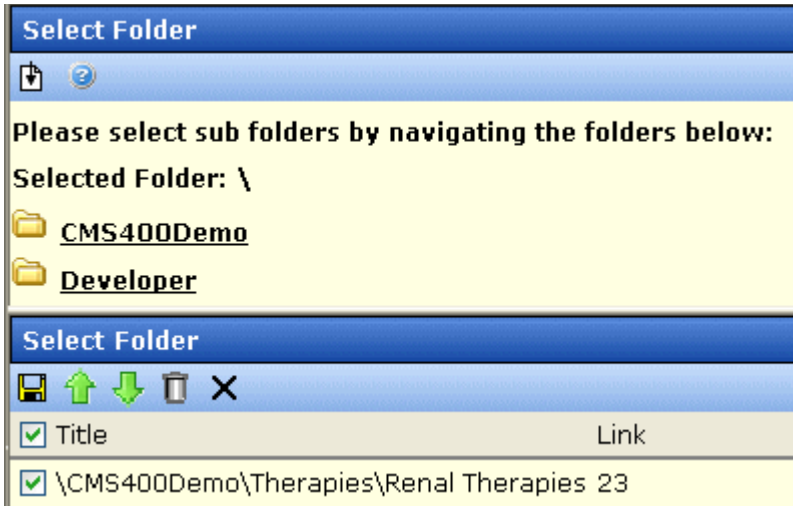
As an example, assume your Web site sells books, and your folders are organized by genre. One of your folders is “Teen Fiction.” You create a submenu that contains the top five sellers in “Teen Fiction.” You then associate the Teen Fiction folder with that submenu.

If a site visitor uses the site search to find any book in that category, and proceeds to a page describing the book, the Smart Menu in the page’s left column displays the five top Teen Fiction titles.

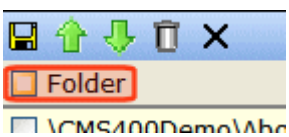
Using the Select Folder Screen

The Select Folder screen lets you assign new folders to the menu, reorder the folders, and delete folders from the menu association. These tasks are described below.

When you click **Change** below **Folder Associations** on the Edit menu screen, the Select Folder screen appears (see image below).



The following table describes tasks you can perform on this screen.

Task	Instructions
Add folder to list	1. In the top of the screen, navigate to the folder you want to add. 2. Click the Add button ( ).
Remove folder from list	1. Click check box to the left of the folder. 2. Click the Delete button ( ).
Remove all folders from list	1. Click check box to the left of **Folder**.  2. Click the Delete button ( ).

Task	Instructions
Move a folder up or down on the list Note: The sequence in which folders appear has no impact on how they are used. It merely affects the appearance of the folders on the Select Folders screen.	1. Click check box to the left of the folder. 2. Click the up or down arrow buttons ( ).
Save changes and return to Edit Menu screen	Click the Save button ( ).
Exit screen; do not save changes	Click the Exit button ( ).

Effect of Assigning a Template to a Menu

If

- you assign a template to a menu

  and

- a user navigates to any content item that uses the template

  and

- a Smart Menu whose `EnableSmartOpen` property is **true** appears on the screen

the Smart Menu automatically displays the items on the associated submenu.

NOTE Navigation to the content item can consist of clicking a quicklink, a menu option, a list summary item, the result of a search, etc.

In effect, you are instructing **Ektron CMS400.NET** to expose a menu whenever a content item that uses one or more selected templates appears on the screen. As a result, a user who begins looking for a specific content item sees similar items on the screen.

As an example, assume your Web site sells books, and your templates are organized by genre. One of your templates is “Teen Fiction.” You create a submenu that contains the top five sellers in “Teen Fiction.” You then associate the Teen Fiction template with that submenu.

If a site visitor uses the Web site search to find any book in that category, and proceeds to a page describing the book, the Smart Menu in the page's left column displays the five top Teen Fiction titles.

Assigning a Template to a Menu

To add a new template, follow these steps.

1. Move to the **Template Associations** area of the Edit menu screen.
2. In the box on the right, enter the template that you are assigning to this menu. It can be a CMS template, or any file that you wish.
3. Click **Add**.

To later change or remove the template, select it then click **Change** or **Remove**.

Managing Users and Permissions

Managing Users & User Groups

Users are people who administer the Web site, create content, or publish content. Without users, the Web site would be blank. In Ektron CMS400.NET, you can add, edit, and delete users to and from the application through the Settings folder in the Workarea.

Every Ektron CMS400.NET user belongs to a User Group. User groups are used when creating permissions and an approval chain for content folders. User groups can be departments in your company (Human Resources, Sales, Engineering) or indicate a user's role (Publishers, Administrators, Editors, etc.).

IMPORTANT! If your system uses the Active Directory Integration Feature, proceed to "Active Directory Feature" on page 804 to learn about user management functions. This chapter only applies to systems that do not use Active Directory Integration.

IMPORTANT! If your system uses LDAP Authentication, proceed to "LDAP Authentication" on page 858. Some functionality in this chapter does apply to LDAP. The LDAP chapter explains which information is applied.

This section explains the most common actions that you will perform on users and user groups. These actions include:

- "Accessing the Users and User Groups Folders" on page 721
- "Creating a New User" on page 722
- "Viewing a User" on page 728
- "Editing a User" on page 728

- ”Deleting a User” on page 730
- ”Assigning Users To User Groups” on page 731

NOTE Only members of the Administrators User Group and those defined in the Manage Members for Role: User Admin screen can view, add, or edit users and user groups.

Accessing the Users and User Groups Folders

All user and user group information is accessible from the Workarea.

Accessing the User Folder

To access the user folder in Ektron CMS400.NET, follow these steps.

1. Access the **Workarea > Settings > Users**.
2. All Ektron CMS400.NET users appear.

From this screen, you can add, edit, and delete users. These procedures are explained in the next sections.

Accessing the User Group Folder

To access the user group folder in Ektron CMS400.NET, follow these steps.

1. Access the **Workarea > Settings > User Groups**.
2. All user groups appear.

From this screen, you can add, edit, and delete user groups. These procedures are explained in the next sections.

Managing Users

IMPORTANT! If you are using Active Directory to Manage users, see ”Associating User Information in AD with Ektron CMS400.NET” on page 818.

The following topics explain how to manage users.

- ”Creating a New User” on page 722
- ”Viewing a User” on page 728
- ”Editing a User” on page 728
- ”Deleting a User” on page 730
- ”Removing Users from User Groups” on page 730

Creating a New User

IMPORTANT! If you are using Active Directory to add a new user, see ”Manually Adding AD User Information to Ektron CMS400.NET” on page 820. If you are using LDAP, see ”Adding User Information from an LDAP Server to Ektron CMS400.NET” on page 864.

Before you can assign a user to a user group, you must add the user to the system. To create a new user, follow these steps.

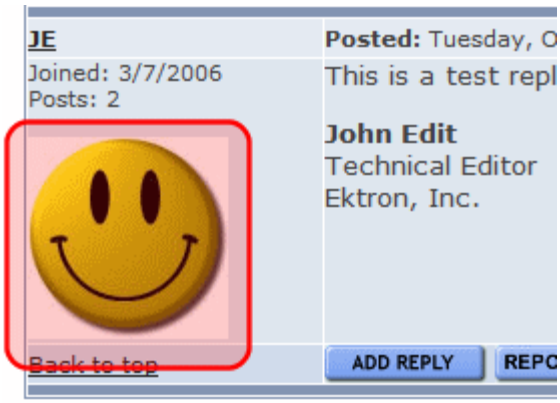
1. Access the User folder, as described in ”Accessing the User Folder” on page 721.
2. Click the Add User button ( ).
3. The Add a New User to the System screen appears.
4. Enter the following information about the user.

Field	Description
Username	Insert a username for the user you want to create.
Organization Organizational Unit Domain	These fields are only available when using LDAP Authentication. *See Also:* ”Adding User Information from an LDAP Server to Ektron CMS400.NET” on page 864.
First Name	Enter the first name of the user.
Last Name	Enter the last name of the user.

Field	Description
Display Name	The name that is used to identify a user on the Web site. This can be different from their Username, which is the name you use to log into the Ektron CMS400.NET Web site. **Important:** This name needs to be unique inside CMS400.NET and it cannot be blank.
Password	Enter a password for the user. Note: Passwords can be either case-sensitive or case-insensitive. For more information, see "Making Passwords Case Sensitive" on page 15.
Confirm Password	Confirm the password by typing it again.
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within **Ektron CMS400.NET**. The dropdown list of choices at this field is derived from the Language Settings screen, available from the **Settings> Configuration** folder. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. *See Also:* "Multi-Language Support" on page 876 Note: If the selected language is not English, French or German, it is only supported after you download the **Ektron CMS400.NET** Language Support Program from Ektron and translate the Web site.
Email Address	Enter the email address of the user. Notification email is sent to this address unless the **Disable E-mail Notification** field is checked. Also, this address identifies the user sending Instant email. *See Also:* "Sending Instant Email" in the **Ektron CMS400.NET** User Manual.

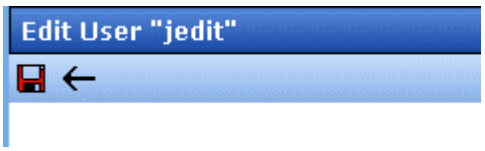
Field	Description
Content and Forum Editor	Determines which editor will be used when this user • replies to a Discussion Board. *See Also:* "Using Discussion Boards on Your Web Site" on page 526 • edits content from the Ektron CMS400.NET Workarea or after signing into your Web site *if* the user is operating a Windows computer and the system administrator has set `UserPreferred` as the value of the web.config file's `ek_EditControlWin` key. *See Also:* "Setting the Editor for Ektron CMS400.NET Users" in the **Ektron CMS400.NET** User Manual. Your choices are **eWebEditPro** and **eWebEdit400**. See Also:"Introduction to Ektron CMS400.NET Editors" in the **Ektron CMS400.NET** User Manual.

Field	Description

Avatar	An image or icon to represent you in the Forum.
	Type in a web path to image. For example: `http://www.example.com/smileyface.gif`
	 
	By default, the maximum file size of an avatar is limited to 200 kilobytes and the height and width of the avatar will be reduced 125 pixels preserving the aspect ratio.
	To change the file size limit, edit this file:
	`C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb`
	In this file, change the line shown below to the size file you wish to allow. For example, to allow 500kb files, change 200 to 500.
	`If (numFileSize > 200) Then`
	Remember, this number is in kilobytes.
	To change the default height and width of the avatar, edit this file:
	`C:\intetpub\wwwroot\<YourSite>\App_Code\VBCode\Utilities.vb`
	In this file, change the following lines to the size you wish to allow. For example, to make avatars have a height and width of 166 pixels, change 125 to 166 in both these lines.
	`Dim Width As Integer = 125`
	`Dim Height As Integer = 125`

Address	Enter the address used to find this user's location when a search based on location is being performed.
Latitude	The latitude used to find this user's location when someone performs a search based on location. Google maps provides a service that takes the address of user and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.

Field	Description
Longitude	The longitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of content and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.
Forum Signature	Adds a signature to this user's posts in the forum. The user does not see the signature in the editor. It is added after he clicks the **Post** button.
Tags	Select from a predefined list of Tags that describe yourself. Or, create a new tag by clicking the **Click To Add A New Tag** link. Placing a check mark in the check box next to a tag activates it for your profile.
Disable Receiving of System Notification Email	Select to disable the email notifications for the user. If you do, the user will not receive the automatic email notification described in "Automatic eMail Notification" on page 1074. However, this field has no effect on the user's ability to receive instant email.
Any custom user properties	See "Custom User Properties" on page 756
Width	If desired, change the width of the screen in which **Ektron CMS400.NET** appears for this user. The width in pixels must be between 400 and 2400. This field accommodates users who have larger monitors and/or prefer a smaller resolution, such as 1280 x 1024.
Height	If desired, you can change the height of the screen in which **Ektron CMS400.NET** appears for this user. The height in pixels must be between 300 and 1800. This field accommodates users who have larger monitors and/or prefer a smaller resolution, such as 1280 x 1024.

Field	Description
Display button text in the title bar	Check this box if you want any button's caption text to appear in the screen title's bar whenever a user moves the mouse over the button. Note the word **Update**, describing the button, in the illustration below. If you do not check this box, the screen's title remains in the title bar when the user moves the mouse over the button, as illustrated below. 
Landing Page after login	If you want one page in your Web site to appear after this user signs in, enter that page's URL. You might select a page that leads to a group of pages that you maintain. If you don't know the URL, navigate to the page, go to the browser address bar and select the text following the directory in which **Ektron CMS400.NET** resides. For example, if the browser address bar says `http://www.example.com/customers.aspx?id=945`, enter **customers.aspx?id=945**.
Set smart desktop as the start location in the Workarea	If you want the Smart Desktop to appear as soon as this user enters the Workarea, click inside this check box. *See Also:* "Understanding the Smart Desktop" on page 19 If you leave this check box blank, when this user enters the Workarea, he goes to the folder of the content specified at the **Landing Page after login** field.

NOTE If email notification is turned off in the setup page, you are notified when editing, adding, or viewing a user.

5. Click the Save button ( ).
6. The View Users in Group Everyone screen appears with the new user included in the table.

NOTE When you add a new user, he is automatically placed in the Everyone user group. To assign users to other groups, see "Assigning Users To User Groups" on page 731.

7. Continue this process until you add all users of your Web site, or are allowed to depending on your license.

NOTE Contact Ektron Sales for pricing of adding more users to your license.

Viewing a User

After adding a user, you can view that information. While viewing a user, you can edit or delete the user.

To view a user, follow these steps.

1. Access the user folder as described in "Accessing the User Folder" on page 721.
2. Click the **Username** of the user you want to view.
3. The View User Information screen is displayed.

   To learn about the fields, see "Enter the following information about the user." on page 722 and "The following fields are only available when editing a user." on page 729

From the View User screen, you can edit or delete users. These actions are described in the next sections.

Editing a User

IMPORTANT! If you are using Active Directory to edit a user, see "Editing User Information in Ektron CMS400.NET" on page 821.

When editing a user, you can change the username, first name, last name, password, user language, and email address. Also, while editing, you can change three fields that were not available when the user was created.

- Account Locked
- Work Page Size
- Landing Page after login

To edit a user, follow these steps.

1. Access the view user screen of the user you want to edit as described in "Viewing a User" on page 728.
2. Click the **Username** of the user you want to edit.
3. The View User Information screen is displayed.
4. Click the Edit button ( ).
5. The Edit User screen is displayed. To learn about most fields, see "Enter the following information about the user." on page 722.

   The following fields are only available when editing a user.

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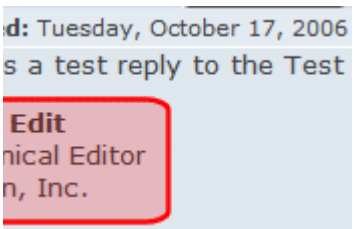
Field	Description
Account Locked	See "Restricting Login Attempts" on page 10
Content and Forum Editor	See "Content and Forum Editor" on page 724
Forum Signature	Adds a signature to your posts in the forum. You do not see the signature in the editor. It is added after you click the **Post** button. 
Work Page Size	See "Work Page Size" on page 26
Landing Page after login	See "Landing Page after login" on page 27

6. Make the necessary changes to the user information.

7. Click the Update button ( ).

Deleting a User

IMPORTANT! If you are using Active Directory to delete a user, see "Deleting Users" on page 821.

When you need to remove a user from the application, you can easily do it from the User's Folder in the Workarea.

WARNING! Once a user is deleted from the database, he is deleted permanently. The process cannot be undone.

To delete a user, follow these steps.

1. Access the view user screen for the user you want to delete, as described in "Viewing a User" on page 728.
2. Click the **Username** of the user you want to delete.
3. The View User Information screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.
6. Click **OK**.

Removing Users from User Groups

IMPORTANT! If you are using Active Directory to remove a user from a group, see "Removing Users from a Group" on page 817.

NOTE Removing a user from a user group does not delete the user from Ektron CMS400.NET. Also, you cannot remove users from the Everyone user group.

To remove a user from a user group, follow these steps.

1. Access the User Groups folder, as described in "Accessing the User Group Folder" on page 721.
2. Click the User Group that includes the user you want to remove.
3. Members of the selected group appear.
4. Click the user to remove.
5. The View User Information screen is displayed.

6. Click the Delete button ( ) to delete the user from the group.
7. A confirmation message is displayed.
8. Click **OK**.

Managing User Groups

The following topics explain how to manage User Groups.

- ”Creating a New User Group” on page 731
- ”Assigning Users To User Groups” on page 731
- ”Viewing the Users in a User Group” on page 733
- ”Editing a User Group” on page 733
- ”Deleting a User Group” on page 734
- ”Removing Users from User Groups” on page 730

Creating a New User Group

To create a new User Group in Ektron CMS400.NET, follow these steps.

1. Access the User Groups folder in the administrator Workarea, as described in ”Accessing the User Group Folder” on page 721.
2. Click the Add User Group button ( ).
3. The Add a New User Group to the System screen is displayed.
4. Enter a name and brief description of the user group you want to create.
5. Click the Save button ( ).

Assigning Users To User Groups

To add a user to a user group, follow these steps.

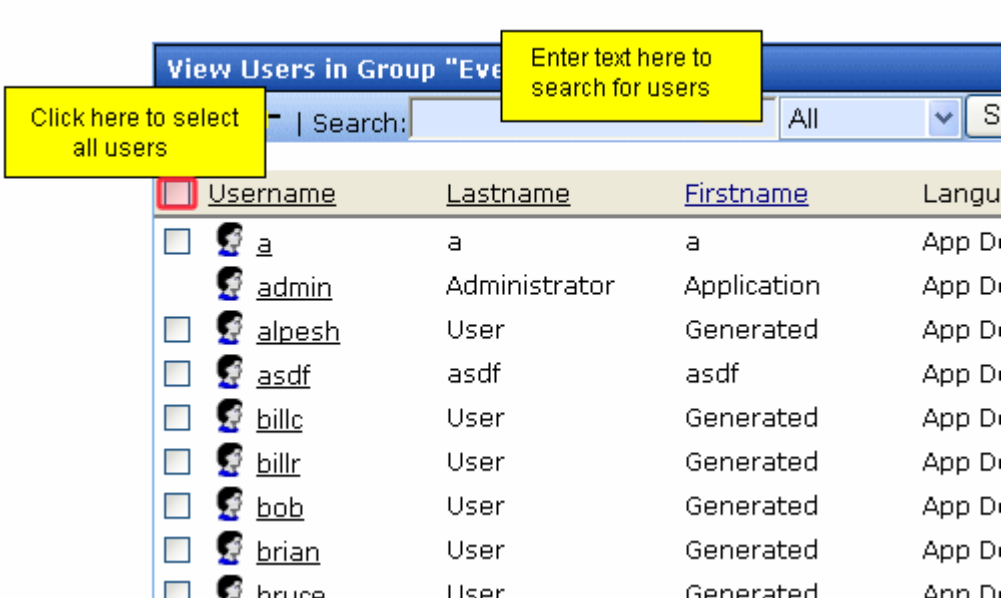
1. Access the **Workarea > Settings > User Groups**.
2. Click the user group to which you want to add a user.

3. The View Users in Group screen appears with all current group members.

NOTE When you create a new user group, no user is initially assigned to it.

Note that you can select any number of users by checking the box to the left of their name. To select all users, check the box in the column header row.

You can also sort the display by **Username**, **Lastname** or **Firstname**.



And, you can enter characters into the **Search** field and find only users that match them. For example, you could enter **bill**, click the **Search** button, and see only users with those characters in their name.

4. Click the Add User button ( ).
5. Users who do not belong to the group appear.
6. Click the user you want to add.
7. A confirmation message is displayed.
8. Click **OK**.
9. The selected user is now a member of the selected group.

10. Continue this process until you add all users into User Groups.

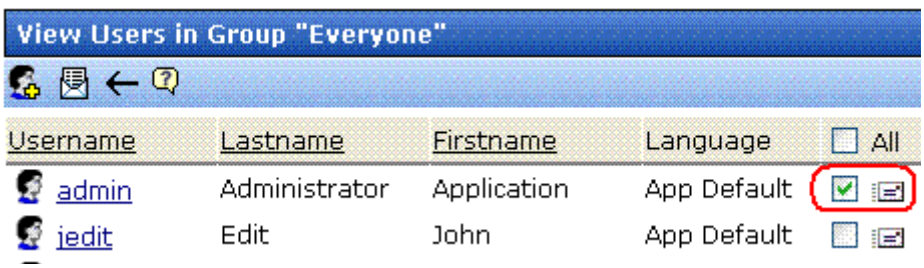
Viewing the Users in a User Group

To view a list of users who are members of a user group, follow these steps.

1. Access the User Group folder in the administrator Workarea, as described in ”Accessing the User Group Folder” on page 721.
2. Click the user group whose members you want to view.
3. The View Users in Group screen appears with a list of users who are members of the group.

From this screen, you can edit or delete user groups, as well as add and remove users to and from the user group.

You can also send an email to any group member by clicking the checkbox next to the email icon on the same line as the user’s name.



After selecting all users to receive email, click the email toolbar button ( ). A new screen appears that lets you compose the email.

Editing a User Group

When editing a User Group, you can only change its name.

NOTE You cannot edit the default Administrators and Everyone user groups.

To edit a user group, follow these steps.

1. Access the View Users in Group screen for the user group you want to edit, as described in "Viewing the Users in a User Group" on page 733.
2. Click the User Group you want to edit.
3. The View Users In Group screen is displayed.
4. Click the Edit button ( ).
5. The Edit User Group screen is displayed.
6. Make the necessary changes.
7. Click the Update button ( ).

Deleting a User Group

When you do not need a User Group anymore, you can delete it from the system.

NOTE You cannot delete the Administrator and Everyone groups.

To delete a user group, follow these steps.

1. Access the View Users in Group screen for the user group you want to delete, as described in "Viewing the Users in a User Group" on page 733.
2. Click the User Group you want to delete.
3. The View Users In Group screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.
6. Click **OK**.
7. The User Group is deleted from the Ektron CMS400.NET Web site.

Removing Users from User Groups

See "Removing Users from User Groups" on page 730.

Membership Users and Groups

Membership users are a category of users who have limited privileges to **Ektron CMS400.NET**. Unlike regular CMS users, they cannot use the Workarea. When a membership user logs in, he can view, add and edit content from the Web site (as permitted) -- all other functionality is disabled.

Membership users can also be granted permission to view private content. This is helpful if your organization has partners who need access to Web pages that should not be visible to the general public.

When you have a Social Network or Community Web site, membership users can create an online area for themselves.

You can use Membership groups to group similar membership users.

Privileges of Membership Users

- They can create, edit, and view content after log in. *See Also:* ”Community Folders” on page 50
- They can be granted permission to view private content. *See Also:* ”Membership User/User Group Example” on page 736 and ”Private Content” on page 752
- They can self-subscribe to receive Web Alerts. *See Also:* ”Web Alert Feature” on page 1021
- If your site is a Community Web site, they become members of the community and can use the following features provided by Ektron’s Community Platform. *See Also:* ”Community Management” on page 948, the user manual section “My Workspace”, and the Developer Manual section “Community Platform Server Controls.”

  - Share their Document Workspace and Photo Gallery with other site visitors

- Join a Community Group
- Mark content the member likes and allow site visitors to see the list of these Favorites
- Mark other members or site users as Colleagues.
- Keep a Journal about themselves.
- Add and read comments left on a Message Board
- Send and receive Messages with other registered users.

- If a Discussion Board requires sign in, they can view and post to them. *See Also:* ”Discussion Boards” on page 465
- If a blog requires authentication, they can post blog comments. *See Also:* “Working with Folders and Content” > “Blogs” in the **Ektron CMS400.NET** User Manual
- If a poll or survey is set up to track participating users, membership users’ names appear on the Form reports.

Membership User/User Group Example

A typical membership scenario is a Partners section of your Web site that contains private content for partners only. Set up a membership user group to include users from your partner’s organization. The group is given add and edit permissions to the Partners section. As a result, any partner can log into Ektron CMS400.NET and view, add, or edit the private content.

This topic is more fully explained through the following subtopics.

- ”Accessing the Membership Module Folder” on page 737
- ”Working with Membership Users” on page 737
- ”Membership User Groups” on page 746
- ”Assigning Permissions for Memberships” on page 750
- ”Troubleshooting Problems with Membership Users and Groups” on page 751

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Accessing the Membership Module Folder

Use the Membership Module folder to enter and edit membership users and user groups. To access the folder, follow these steps.

1. Navigate to **Workarea > Modules > Community Management**.
2. Click the **Memberships** folder to view its subfolders.

Folder Name	More Information
Users	”Working with Membership Users” on page 737
Users not Verified	”What Happens if Verification email is Used” on page 1055
User Groups	”Membership User Groups” on page 746
Messages	”What Happens if Verification email is Used” on page 1055

Working with Membership Users

The following sections explain all actions that may be performed on membership users via the following topics.

- ”Adding Membership Users” on page 738
- ”Adding Membership Users to a Membership User Group” on page 741
- ”Setting Permissions on Private Content for Membership Users” on page 741
- ”Viewing Membership User Information” on page 741
- ”Editing Membership Users” on page 743
- ”Deleting Membership Users” on page 746

Adding Membership Users

NOTE If you are using the Web Alert feature, any site visitor can sign up to be a membership user. That represents another way to add membership users. For more information, see "How Users Sign up for Subscriptions" on page 1053.

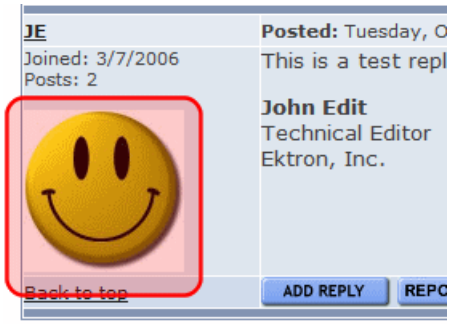
To add a new membership user, follow these steps.

1. Form the Workarea, click **Modules > Community Management > Memberships > Users**.
2. Click the Add Membership User button ( ).
3. The Add Membership User screen is displayed.
4. Complete the form using the following table as a reference.

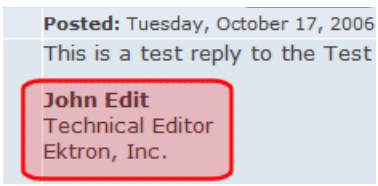
Field	Description
Username	Enter a unique username for the membership user.
First Name	Enter the first name of the user.
Last Name	Enter the last name of the user.
Display Name	The name that is used to identify a Membership user on the Web site. This can be different from their Username, which is the name you use to log into the Ektron CMS400.NET Web site. **Important:** This name needs to be unique inside CMS400.NET and it cannot be blank.
Password	Enter a password for the user.
Confirm Pwd	Re-type the password to confirm it is correct.

Field	Description
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within **Ektron CMS400.NET**. The dropdown list of choices at this field is derived from the Language Settings screen, available from the **Settings> Configuration** folder. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. *See Also:* "Multi-Language Support" on page 876 Note: If the selected language is not English, French or German, it is only supported after you download the **Ektron CMS400.NET** Language Support Program from Ektron and translate the Web site.
Email Address	Enter an email address for the user.
Forum Editor	Determines which editor will be used when this user replies to a Discussion Board. *See Also:* "Using Discussion Boards on Your Web Site" on page 526

Field	Description

Avatar	An image or icon to represent the user in the Forum.
	Type in a web path to image. For example: `http://www.example.com/smileyface.gif`
	 
	
	Changing Maximum File Size
	By default, an avatar's maximum size is 200 kilobytes. The height and width of the avatar is reduced 125 pixels preserving the aspect ratio.
	To change the file size maximum, edit this file:
	`C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb`
	In this file, change the line shown below to the desired size:
	`If (numFileSize > 200) Then`
	For example, to allow 500kb files, change 200 to 500.
	Remember, this number is in kilobytes.
	Changing Default Height and Width
	To change the default height and width of the avatar, edit this file:
	`C:\intetpub\wwwroot\<YourSite>\App_Code\VBCode\Utilities.vb`
	In this file, change the following lines.
	`Dim Width As Integer = 125`
	`Dim Height As Integer = 125`
	For example, to set avatars to a height and width of 166 pixels, change 125 to 166 in both lines.

Address	The address used to find your location when a user is performing a search based on location.
Latitude	The latitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of user and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.

Field	Description
Longitude	The longitude used to find your location when a user is performing a search based on location. Google maps provides a service that takes the address of content and returns its latitude and longitude. **Note**: You don't need to use Google's automatic retrieval of latitude and longitude. Instead, you can enter the values manually.
Forum Signature	Adds a signature to your posts in the forum. You do not see the signature in the editor. It is added after you click the **Post** button. 
Tags	Select from a predefined list of Tags that describe yourself. Or, create a new tag by clicking the **Click To Add A New Tag** link. Placing a check mark in the check box next to a tag activates it for your profile. *See Also:* "Tags" on page 989

5. Click the Save button ( ).

Adding Membership Users to a Membership User Group

See "Adding Membership Users to a Membership User Group" on page 748.

Setting Permissions on Private Content for Membership Users

See "Assigning Permissions for Memberships" on page 750.

Viewing Membership User Information

To view membership user information, follow these steps.

1. Access the membership users folder, as described in "Accessing the Membership Module Folder" on page 737.

NOTE The `ek_PageSize` setting in the web.config file determines the maximum number of users that can appear on a page before it "breaks." When a page breaks, additional entries appear on another screen, and the following text appears near

the bottom of the list:
Page 1 of 2
[First Page] [Previous Page] [Next Page] [Last Page]

The View Users in Group All_Members screen lets you add new users, as well as sort and search for existing users. See "Sorting Membership Users" on page 742 and "Searching for Membership Users" on page 742.

2. Click the user you want to view.
3. The View Membership User Information screen is displayed.

From this screen, you can edit or delete membership users.

Sorting Membership Users

You can arrange users on the View Users in Group All_Members screen by clicking the following column headers:

- Username
- Last Name
- First Name

By default, users are arranged alphabetically by Username, starting with the beginning of the alphabet. To switch that arrangement so that users whose username is *last* when sorted alphabetically, click the column header. To revert to the original arrangement, click the header again.

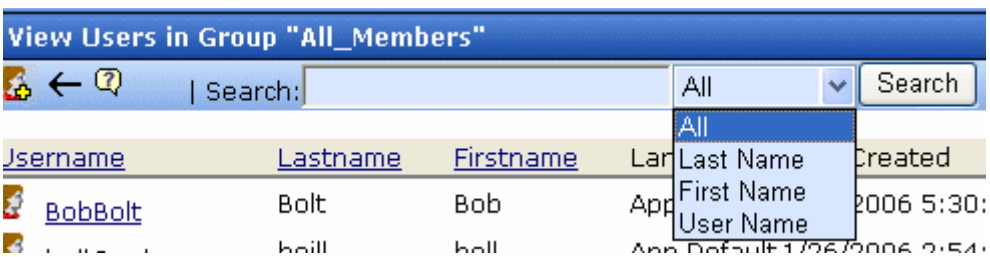
You can also sort the list by last name or first name. Like username, clicking the column header reverses the arrangement.

Searching for Membership Users

You can use the **Search** field (circled below) to display only users who meet your criteria. This would be especially helpful to filter out a large number of membership users.

Use the **Search** field to enter unique characters to find members you seek. For example, to find all members whose username includes **@example.com**, enter that into the **Search** field and click the **Search** button. Only users with those characters in that exact sequence in their username, first name, or last name appear on the screen.

You can also search by First and Last name fields. Click the down arrow to the left of the **Search** button to select a field to search.



The sequence of search characters must match your entry in the **Search** field. For example, if you are searching by last name and enter **MI**, anyone whose name is *Smith* appears. But, if you enter **IM,** users with the last name of *Smith* do not appear.

Also, the search is case-insensitive, so **MI** produces the same results as **mi**.

Editing Membership Users

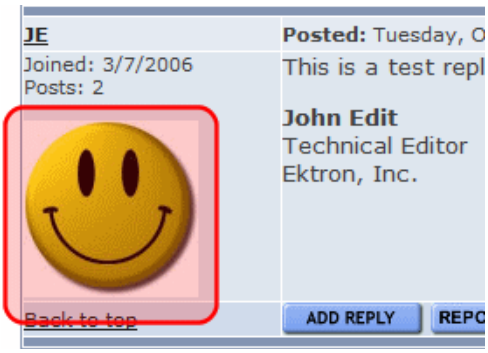
To edit a membership user, follow these steps.

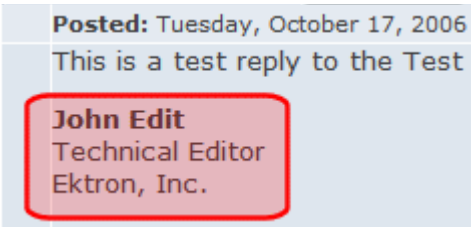
1. Access the View Membership User screen of the membership user you want to edit, as described in ”Viewing Membership User Information” on page 741.

2. Click the Edit button ( ).
3. The Edit Membership User Information screen is displayed.
4. Use the following table to assist with editing the membership user's information.

Field	Description
Username	Enter a unique username for the membership user.
First Name	Enter the first name of the user.
Last Name	Enter the last name of the user.
Display Name	The name used to identify a Membership user on the Web site. This can be different from their Username, which is the name they use to log in to the Ektron CMS400.NET Web site. **Important:** This name needs to be unique inside CMS400.NET and it cannot be blank.
Password	Enter a password for the user.
Confirm Pwd	Re-type the password to confirm it is correct.
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within **Ektron CMS400.NET**. This field's list of choices is derived from the **Settings > Configuration > Language Settings** screen. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. *See Also:* "Multi-Language Support" on page 876 Note: If the selected language is not English, French or German, it is only supported after you download the **Ektron CMS400.NET** Language Support Program from Ektron and translate the Web site.
Email Address	Enter an email address for the user.

Field	Description
Forum Editor	Determines which editor will be used when this user replies to a Discussion Board. *See Also:* "Using Discussion Boards on Your Web Site" on page 526

Avatar	An image or icon to represent the user in the Forum.
	Type in a web path to image. For example: `http://www.example.com/smileyface.gif`
	 
	By default, the maximum file size of an avatar is limited to 200 kilobytes and the height and width of the avatar will be reduced 125 pixels preserving the aspect ratio.
	To change the file size limit, edit this file:
	`C:\inetpub\<wwwroot>\<YourSite>\Workarea\Upload.aspx.vb`
	In this file, change the line shown below to the size file you wish to allow. For example, to allow 500kb files, change 200 to 500.
	`If (numFileSize > 200) Then`
	Remember, this number is in kilobytes.
	To change the default height and width of the avatar, edit this file:
	`C:\intetpub\wwwroot\<YourSite>\App_Code\VBCode\Utilities.vb`
	In this file, change the following lines to the size you wish to allow. For example, to make avatars have a height and width of 166 pixels, change 125 to 166 in both these lines.
	`Dim Width As Integer = 125`

Field	Description
Forum Signature	Adds a signature to the membership user's posts in the forum. You do not see the signature in the editor. It only appears after you click the **Post** button. 

5. Click the Update button ( ).

Deleting Membership Users

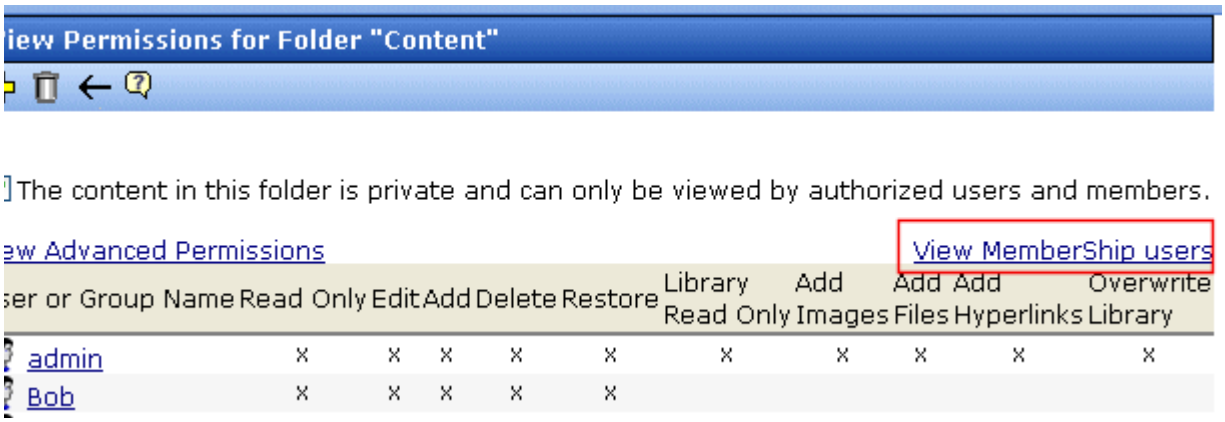
To delete a membership user, follow these steps.

1. Access the View Membership User screen of the membership user you want to edit, as described in "Viewing Membership User Information" on page 741.
2. Click the Delete button ( ).
3. A confirmation message is displayed.
4. Click **OK**.

Membership User Groups

IMPORTANT! Membership User Groups and Community Groups are two different concepts. Community Groups allow users with similar interest to join together in a social networking environment. See "Community Groups" on page 950. Membership User Groups are explained below.

Membership user groups organize similar membership users, reducing the effort required to assign identical permissions to many users. You can assign them permission to any folder by going to **Folder Properties** > **View Permissions for Folder** > **View MemberShip users**.


iew Permissions for Folder "Content"
The content in this folder is private and can only be viewed by authorized users and members.
ew Advanced Permissions
View MemberShip users
ser or Group Name Read Only Edit Add Delete Restore Library Read Only Add Images Add Files Add Hyperlinks Overwrite Library
admin
Bob

The following sections explain membership user group management.

- ”Adding Membership User Groups” on page 747
- ”Viewing Users in a Membership User Group” on page 748
- ”Adding Membership Users to a Membership User Group” on page 748
- ”Setting Permissions on Private Content for Membership User Groups” on page 748
- ”Editing Membership User Group Name” on page 748
- ”Deleting User from Membership User Group” on page 749
- ”Deleting Membership User Groups” on page 749

Adding Membership User Groups

To create a new membership user group, follow these steps.

1. Access the membership user group folder, as described in ”Accessing the Membership Module Folder” on page 737.
2. Click the Add Membership User Group button ( ).
3. The Add a New User Group screen is displayed.
4. Enter a unique name for the group.
5. Click the Save button ( ).

See Also: ”Membership User Groups” on page 746

Viewing Users in a Membership User Group

To view the information about a membership user group, follow these steps.

1. Access the membership user group folder, as described in "Accessing the Membership Module Folder" on page 737.
2. Click the membership user group you want to view.
3. The View Users In Group screen is displayed.

See Also: "Membership User Groups" on page 746

Adding Membership Users to a Membership User Group

To add a membership user to a membership user group, follow these steps.

NOTE Only membership users can be added to membership user groups.

1. Access the View Membership User Group screen for the membership user group to which you want to add a membership user, as described in "Viewing Users in a Membership User Group" on page 748.
2. Click the Add Membership User button ( ).
3. The Add User to Group screen is displayed.

NOTE Only membership users who do not belong to the group appear.

4. Click the user you want to add.
5. A confirmation message is displayed.
6. Click **OK**.

See Also: "Membership User Groups" on page 746

Setting Permissions on Private Content for Membership User Groups

See "Assigning Permissions for Memberships" on page 750

Editing Membership User Group Name

To edit a membership user group name, follow these steps.

NOTE The membership user group, All_members, cannot be edited.

1. Access the View Membership User Group screen for the membership group you want to edit, as described in ”Viewing Users in a Membership User Group” on page 748.
2. Click the Edit button ( ).
3. The Edit User Group screen is displayed.
4. Change the membership group name.
5. Click the Update button ( ).

See Also: ”Membership User Groups” on page 746

Deleting User from Membership User Group

To remove a user from a membership user group, follow these steps.

1. Access the View Membership User Group screen for the membership user group that contains the membership user you want to delete, as described in ”Viewing Users in a Membership User Group” on page 748.
2. Click the name of the membership user you want to remove.
3. The View User Information screen is displayed.
4. Click the Delete button ( ).
5. A confirmation message is displayed.
6. Click **OK**.

Deleting Membership User Groups

To delete a membership user group, follow these steps.

1. Access the View Membership User Group screen for the membership user group you want to delete, as described in ”Viewing Users in a Membership User Group” on page 748.
2. Click the Delete button ( ).
3. A confirmation message is displayed.
4. Click **OK**.

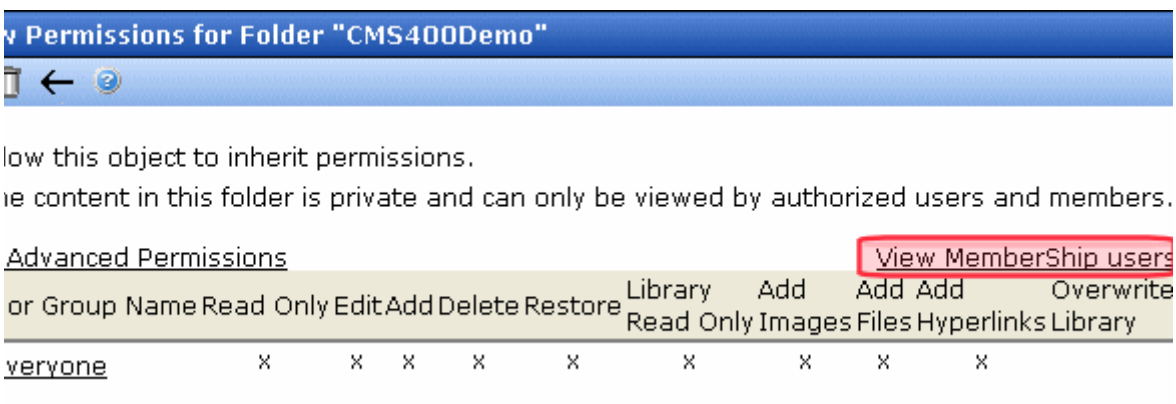
Assigning Permissions for Memberships

After you create membership users and groups, you can assign them permissions to content folders. To do so, follow these steps.

1. Access the permissions table for the content or folder to which you want to assign membership permissions.

For	See
Content folders	"Setting Permissions for a Content Folder" on page 780
Content	"Setting Permissions for Content" on page 784

2. If necessary, break the inheritance for the content or folder. *See Also:* "Inheritance" on page 778
3. If desired, set the folder or item to **Private**. *See Also:* "Private Content" on page 752
4. Click **View MemberShip Users** on the right side of the permissions table.


Permissions for Folder "CMS400Demo"
low this object to inherit permissions.
ıe content in this folder is private and can only be viewed by authorized users and members.
Advanced Permissions
View MemberShip users
or Group Name Read Only Edit Add Delete Restore Library Read Only Add Images Add Files Add Hyperlinks Overwrite Library
veryone

5. The membership users/user groups added to the permissions table are displayed.
6. Click the Add button ( ).
7. The Add Permissions screen is displayed.

8. Click a username or user group name to add to the permissions table.
9. The Add Permissions Options screen is displayed.
10. Check appropriate permissions for the membership user or group.
11. Click the Save button ( ).

Troubleshooting Problems with Membership Users and Groups

Symptom	Problem	Solution

Error message:
`Response object error 'ASP 0251 : 80004005'`
 	
`Response Buffer Limit Exceeded`
	Response Buffer exceeded its limit	Increase limit. To do so, follow these steps.
		1. Stop IIS.
		2. Locate the file `%WinDir%\System32\Inetsrv\Metabase.xml`
		3. Modify the AspBufferingLimit value.
		4. Restart IIS.
		The default value is 4194304, which is about 4 MB. Suggest changing it to 20MB (20971520) and see if that helps.

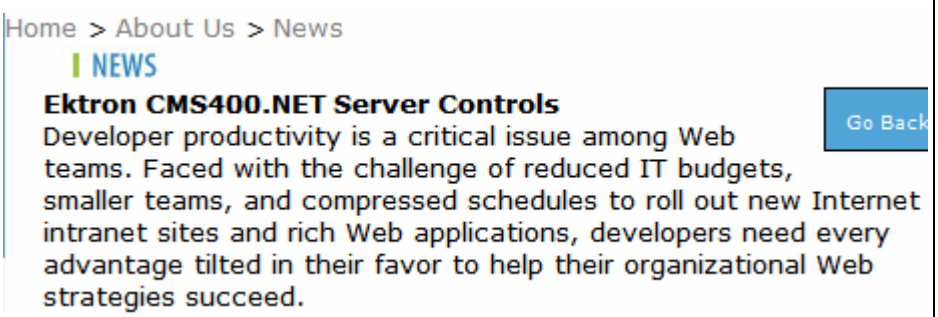
Private Content

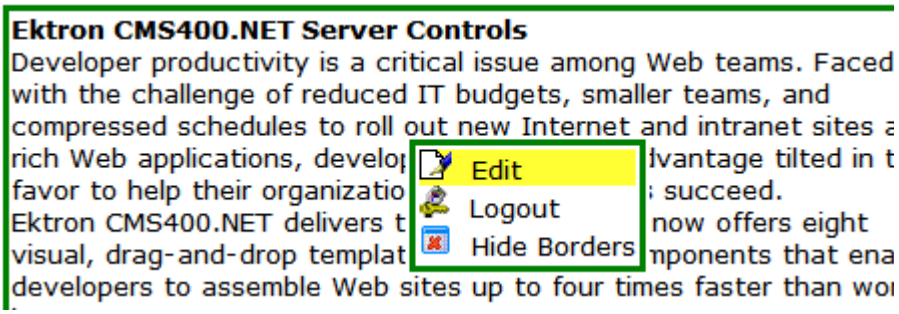
Private content is only available to CMS users or membership users with at least Read-Only permissions for its folder. Those users must log in to work with the private content. Unauthorized site visitors cannot see it.

NOTE All members of the Administrators group have access to private content, even if they are not granted permission on the View Permission for Folder screen.

You can designate a folder to be private. In that case, all content in it and its subfolders is private (if they inherit permissions). Alternatively, you can designate specific content items as private.

To demonstrate private content, the following table shows how a user's status affects the display of content in three scenarios.

Scenario	Private Content Web Page
Site visitor	
Logged in user with read-only permission	

Scenario	Private Content Web Page
Logged-in user with edit permissions	

Note: You can determine the appearance of the menu shown above. See "Changing the Appearance of the Web Site Content Menu" on page 21.

Making a Folder Private

NOTE You can only set content to private when inheritance is broken. *See Also:* "Inheritance" on page 778.

To make a folder private, follow these steps.

1. In the Workarea, navigate to the folder that you want to make private.
2. Click **View > Folder Properties**.
3. Click the View Permissions button ( ).
4. If necessary, uncheck the box that says **Allow this object to inherit permissions**. (Inheritance must be disabled before you can make the content private.)
5. Check the box that says **The content in this folder is private and can only be viewed by authorized users and members**.
6. A confirmation message is displayed.
7. Click **OK**.

All content in the folder is now private. As new content is added, it is automatically set to private.

Making Content Private

To make any content private, follow these steps. *See Also:* "Making Assets Private" on page 754

1. In the Workarea, navigate to the folder that contains the content you want to make private.
2. Click the content item you want to make private.
3. Click the View Permissions button ( ).
4. If necessary, uncheck the box that says **Allow this object to inherit permissions**. (Inheritance must be disabled before you can make the content private.)
5. Check the box that says **This content is private and is NOT viewable on the public Web site**.
6. A confirmation message is displayed.
7. Click **OK**.

The content is now private.

Making Assets Private

If assets are set to private, they are handled like other private content with one important exception: Unless you follow the procedure described below, anyone can access an asset by *typing the URL of the asset into the browser's address field*.

If a user attempts to access the asset in any other way (such as, linking to it from a Web page), the regular methods of making content private work. See "Making a Folder Private" on page 753 and "Making Content Private" on page 754.

To make assets private even if someone types their URL into the browser's address field, follow these steps.

NOTE If site users receive a 404 Page Not Found Error when trying to view private assets, make sure you have completed all step below.

1. Open your Web site's web.config file, located in the site root folder.
2. Make sure the following line is uncommented.

```
<remove verb="GET,HEAD,POST" path="*"/>
```

3. Comment out the eight lines indicated below.

```
<httpHandlers>
<remove verb="GET,HEAD,POST" path="*"/>
<add
verb="HEAD,OPTIONS,PROPFIND,PUT,LOCK,UNLOCK,MOVE,COPY,GETLIB,PROPPATCH,MKCOL,DELETE,(GETSOURCE),(HEA
DSOURCE),(POSTSOURCE)" path="*" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<!--<add verb="GET,POST" path="*.doc" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.docx" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.xls" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.xlsx" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.ppt" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.pptx" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.vsd" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
<add verb="GET,POST" path="*.vsdx" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>-->
```

Eight `add verb` statements in the middle are commented out.

4. Make sure the following line is uncommented.

```
<add verb="GET,HEAD,POST" path="*" type="Ektron.ASM.EkHttpDavHandler.EkDavHttpHandlerFactory"/>
```

5. Save web.config.

Custom User Properties

Custom User Properties allow you to create custom fields. These custom fields appear on the User Properties and Membership User Properties screens, and on the Membership server control. They are used to define information about a user beyond the standard Ektron CMS400.NET user properties, such as Username, First Name, Password and email Address.

Examples of Custom User Properties might be:

- employee ID
- phone number
- phone extension
- instant message screen name
- position
- start date
- department
- birthday
- the IP address of the user's machine

Your ability to create and manage custom user properties is explained through the following topics.

- "The View Custom Properties Screen" on page 757
- "Adding a Custom User Property" on page 758
- "Editing a Custom User Property" on page 767
- "Deleting a Custom User Property" on page 768
- "Setting the Custom User Properties Order" on page 769
- "Using Custom User Properties for Non-English Languages" on page 771

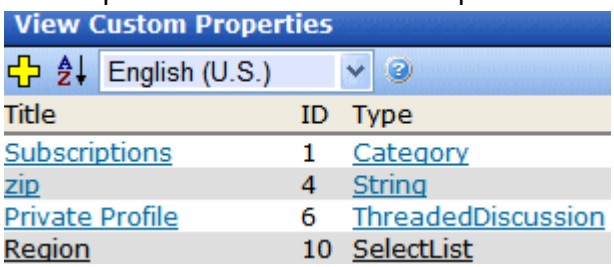
NOTE Only members of the Administrator User Group can work with Custom User Properties.

The View Custom Properties Screen

Use the View Custom Properties screen to create custom properties for users and membership users. From the View Custom Properties screen, you can:

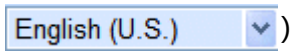
- add a new custom property. See "Adding a Custom User Property" on page 758
- edit a custom property. See "Editing a Custom User Property" on page 767
- reorder the way custom properties appear on the users and membership users screen. See "Setting the Custom User Properties Order" on page 769
- work with custom properties in different languages. See "Using Custom User Properties for Non-English Languages" on page 771

Below is an example of the View Custom Properties screen.



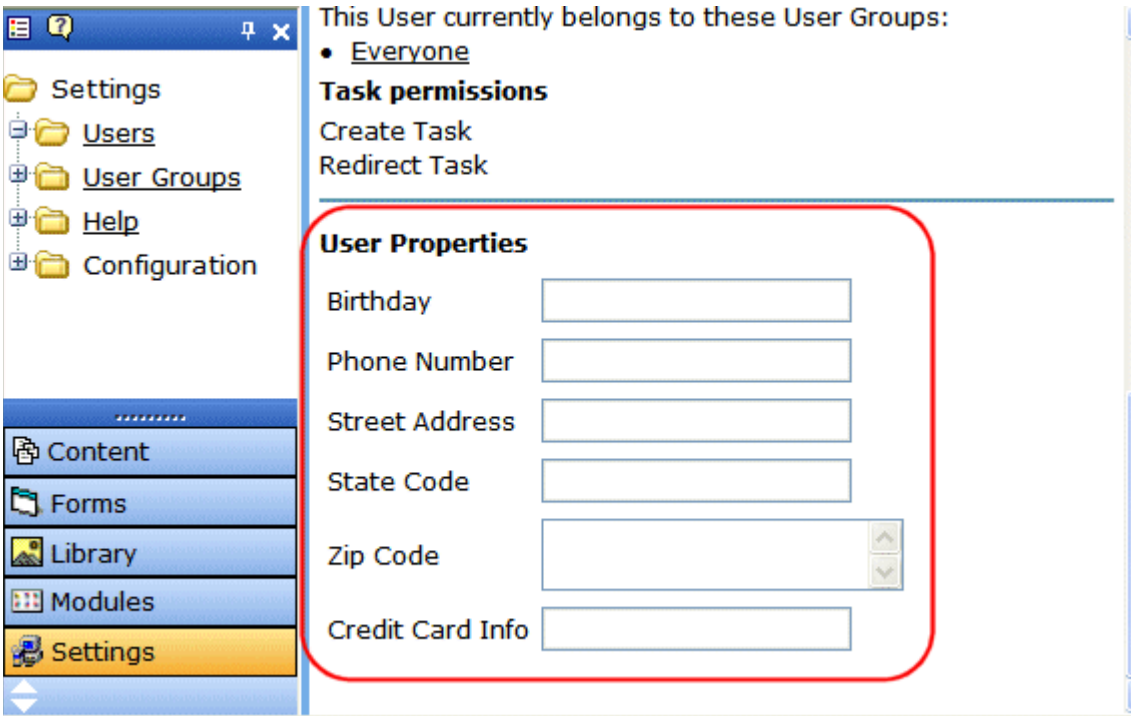
The table below describes the View Custom Properties screen.

Buttons, Dropdown Boxes or Fields	Description	For More Information
Add button ( )	Add custom user properties.	"Adding a Custom User Property" on page 758
Reorder button ( )	Change the order in which the custom properties appear on the Users or Membership User Properties screen.	"Setting the Custom User Properties Order" on page 769

Buttons, Dropdown Boxes or Fields	Description	For More Information
Language Selection Dropdown List ()	Allows you to view custom user properties by language.	"Viewing Custom User Properties By Language" on page 774
Title Field	Displays the title of a custom user property. When viewing by language, the title changes to the title used in a specific language if it has been defined. Click a **Title** to edit the property. Note: The title and label are the same field. On some screens, **Title** is used; on others **Label** is used.	"Editing a Custom User Property" on page 767
Type Field	Shows the Type that was chosen for a custom user property.	"Type" on page 760

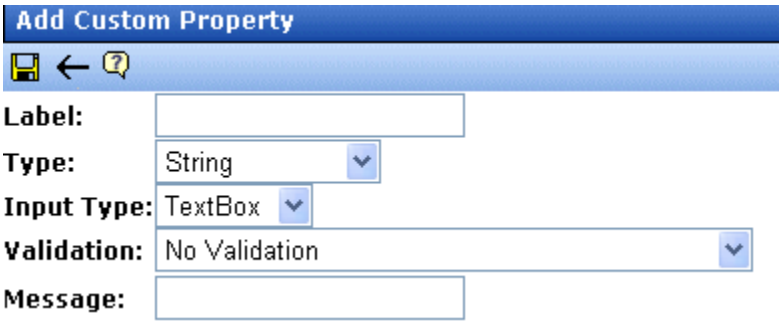
Adding a Custom User Property

After you add a custom user property, it appears on all User and Membership User Information screens, under the **User Properties** header. When new users and membership users are added, custom user properties appear during the creation process.



Follow these steps to add a custom user property.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.
2. Choose the standard language used in your **Ektron CMS400.NET** Workarea.
3. Click the **Add Property** button ( ).
4. The Add Custom Property screen appears.



5. Complete the screen according to the table below.

The Custom User Properties Fields

The following table describes the custom user properties fields

Field	Description	More Information
Label	Title of the property you are adding. For example, Employee ID. Note: The Title and Label are the same field. On some screens the word Title is used, on others the word Label is used.	
Type	The property's data type. Once a type is selected and saved, you cannot change it. You must delete the custom property and re-enter it.	"The Type Field" on page 761
Input Type	Choose how a user is able to enter a response to the property.	"The Input Type Field" on page 762
Validation	Ensures the right type of data is entered in a text box or text area.	"Validation" on page 763
Min Value	If desired, enter the minimum value you want to allow. The Min Value only appears when the following Validations are used: Numeric Only, Date Only and U.S. Zip Code. The following is an example of a Date Only Min Value: **01/01/1900**.	

Field	Description	More Information
Max Value	If desired, enter the maximum value you want to allow. The Max Value only appears when the following Validations are used: Numeric Only, Date Only and U.S. Zip Code. The following is an example of a Date Only Max Value: **01/01/1987**.	
Message	A message that appears when information entered in a user property violates the validation criteria. For example, if the validation is U.S. Zip Code, you might use the following message: **Please enter a valid zip code**	

6. Click the **Save** button ( ).
7. The new property appears on the View Custom Properties screen.

The Type Field

The following table describes the types available in the Type field.

Types	Description	Input Types Available	Validations Available
String	Accepts all alpha, numeric, and symbol characters	• Text Box • Text Area • Hidden	All validations *See Also:* "Validation" on page 763
Boolean	Accepts a true or false response	• Check Box	None
Numeric	Accepts numbers only	• Text Box	• No Validation • Cannot be blank • Numeric Only • U.S. Zip Code • Dollar Amount

Types	Description	Input Types Available	Validations Available
Date	Only a date can be entered.	• Text Box	• No Validation • Cannot be blank • Date Only
SelectList	Select a response from a list of choices. *See Also:* "SelectList Field" on page 764	NA	NA
Multi SelectList	Select any number of responses from a list of choices. *See Also:* "MultiSelectList Field" on page 766	NA	NA
Category	A system-defined type that appears when the first subscription is created. One entry covers all subscriptions. *See Also:* "Defining Subscriptions" on page 1043.	NA	NA

The Input Type Field

The following table describes possible responses to the **Input Type** field.

Input Type	Description	An Option When Used With
Text Box	Creates a standard text box. Below is an example of a text box. 	• String • Numeric • Date
Text Area	Creates a multi-lined area for entering text. Typically used when more than one line of text needs to be added. Below is an example. 	• String

Input Type	Description	An Option When Used With
Hidden	Hides the input field. This can be used by an administrator to add additional values at postback time. This requires a developer to add client-side JavaScript.	• String
Check Box	Creates a checkbox. Used when the field requires a boolean (true / false) response. Below is an example of a check box.	• Boolean

Validation

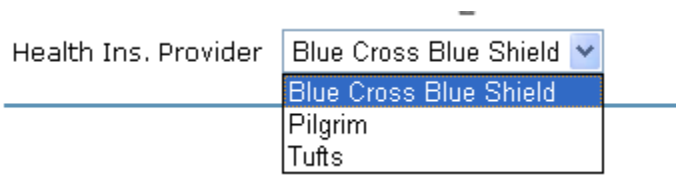
The following table describes the validations available in the **Validation** field.

Validation	Description	An Option When Used With
No Validation	The entry is not checked.	• String • Numeric • Date
Cannot be blank	A response must be entered.	• String • Numeric • Date
Numeric Only	The response must be a number.	• String • Numeric
Text Only	The response must be characters.	• String
Date Only	The response must be entered in the following format: mm/dd/yyyy.	• String • Date
Email Only	The response must be entered as an Email address. For example, username@domain.domainextention.	• String
Credit Card Only	The response must be entered as a credit card number. For example, nnnn nnnn nnnn nnnn	• String

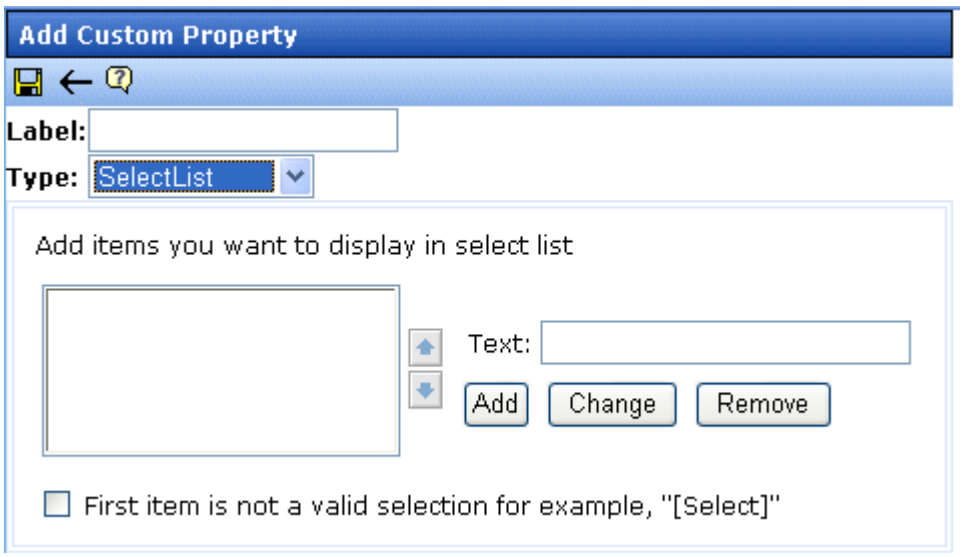
Validation	Description	An Option When Used With
Social Security Only	The response must consist of nine digits in this pattern: nnn-nn-nnnn.	• String
U.S. State Code	A two letter state code. For example: NH = New Hampshire.	• String.
U.S. Zip Code	The response must consist of 5 (nnnnn) or 9 digits separated by a dash after the fifth (nnnnn-nnnn). Note: If you use the Numeric Type, you cannot have a dash or space when using a nine digit Zip Code	• String • Numeric
Valid US Phone Number	The response must consist of a 10 digits in this pattern: nnn-nnn-nnnn.	• String
Canadian Postal Code	The response must consist of 6 (xnx nxn) alpha or numeric characters with a space after the first three characters.	• String
Time HH:MM or HH:MM:SS or HH:MM:SS.mm	Time is entered in one of the following three formats. **HH:MM** - Hours and Minutes 09:30 **HH:MM:SS** - Hours, Minutes and Seconds 09:30:45 **HH:MM:SS.mm** - Hours, Minutes, Seconds and milliseconds 09:30:45.002	• String
IP Address	The response must be in the form of an IP address.	• String
Dollar Amount	This validation works differently depending on the Type used. If used with the *String* Type, you can have a dollar sign ($) along with the money amount in the text field. When used with the *Numeric* Type, you are not allowed to have a dollar sign ($) in the text field. The following are examples of each type with validation: **String** - $3.00 **Numeric** - 3.00	• String • Numeric
Canadian Social Insurance Number	The response must consist of nine digits in this pattern (nnn nnn nnn).	• String

SelectList Field

Use a **SelectList** field to present the user completing the User Information or Membership User Properties screen with a list of choices. See example below.



When you create a custom user property and specify its type to be **Select List**, the screen changes as shown below.



Completing a SelectList Field Entry

To add an item to the list, enter its text in the **Text** field, then click the **Add** button. Added items then appear in the larger box on the left.

You can then

- *remove* any item from the list by clicking it. It appears in the **Text** field. Click **Remove**.
- *change* the text of any list item by clicking it. It appears in the **Text** field. Make changes then click **Change**.
- *change the sequence* of list items by selecting an item then clicking the up or down arrow to move the item

Using the First List Item to Prompt a Response

You can use the first list item to prompt the user to make a selection instead of being a valid response. For example, the first list item may say **Select from a list of choices**. To do this, check the **First item is not a valid selection for example, "[Select]"** check box.

If you do, the field has an asterisk (*) next to it (indicating it is required) on the User Information and Membership User Properties screens. The user completing the screen must choose any selection other than the first item. If he tries to file the screen without choosing a different item, the following error message appears:

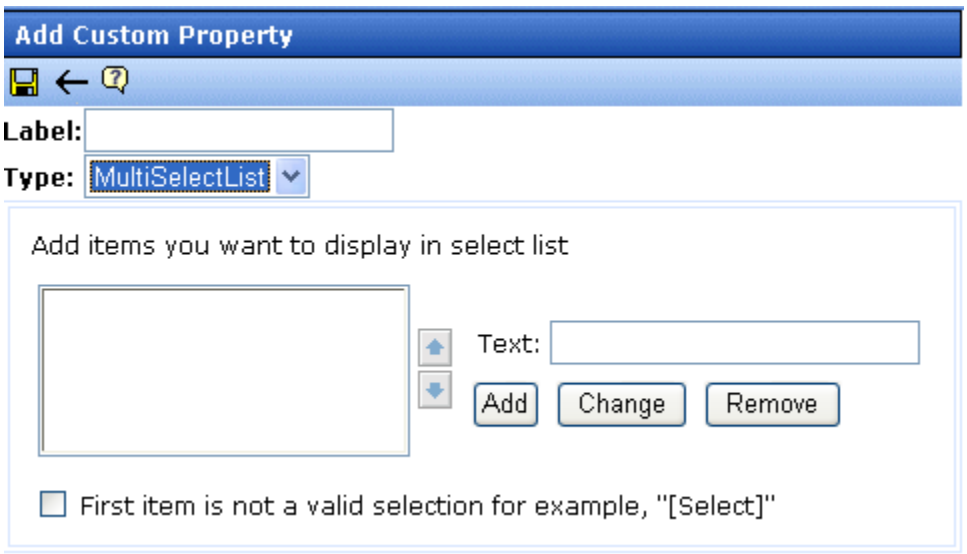
Please fill in all required fields (*)

MultiSelectList Field

Use a **MultiSelectList** field to present the user completing the User Information or Membership User Properties screen with a list of choices. The user can choose as many responses as appropriate. See example below.

Selected items are indicated by a blue background.

When you create a custom user property and specify its type to be **MultiSelect List**, the screen changes as shown below.



For information about completing the screen, see "Completing a SelectList Field Entry" on page 765.

Editing a Custom User Property

When you click a custom user property's title, you are brought to the Edit Custom Property Screen. From this screen, you can edit and delete a custom property or create a version of the custom property in a non-English language.

When you edit a custom user property, the changes are applied to all users and membership users. These changes are also applied to any other language versions of the custom properties that exist.

To learn how to:

- edit a custom user property. See "Editing a Custom User Property" on page 768.
- delete a custom property. See "Deleting a Custom User Property" on page 768.
- create a custom property for a non-English language. See "Create a Custom User Property for a Non-English Language" on page 771.

Editing a Custom User Property

When editing a custom user property, the changes are available to users and membership users when the save button is clicked.

Follow these steps to edit a custom user property.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.
2. Click the **Title** of the Custom User Property you want to edit.
3. Choose the field you want to change. You can edit the following fields:

- Label
- Input Type
- Validation
- Min Value
- Max Value
- Message

For descriptions of these fields, see ”The Custom User Properties Fields” on page 760.

NOTE You cannot edit the **Type** field. If you need to change the type, you must delete the custom user property and create a new one.

WARNING! If you delete a custom user property, it is removed from all users and membership users. Any information that has been collected about users and membership users for that property will be lost. In addition, any language versions of the custom user property are deleted.

4. Click the **Save** button ( ).
5. When you click a user or membership user, you see your changes.

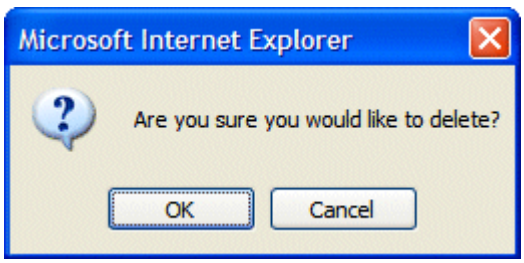
Deleting a Custom User Property

If you delete a custom user property, it is removed from all users and membership users. Any information that has been collected about users and membership users for that property will be lost. In addition, any language versions of the custom user property are deleted.

Follow these steps to delete a custom user property.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.
2. Click the **Title** of the custom user property you want to delete.
3. Click the **Delete** button ( ).

   A dialog box appears asking if you are sure you would like to delete the item.

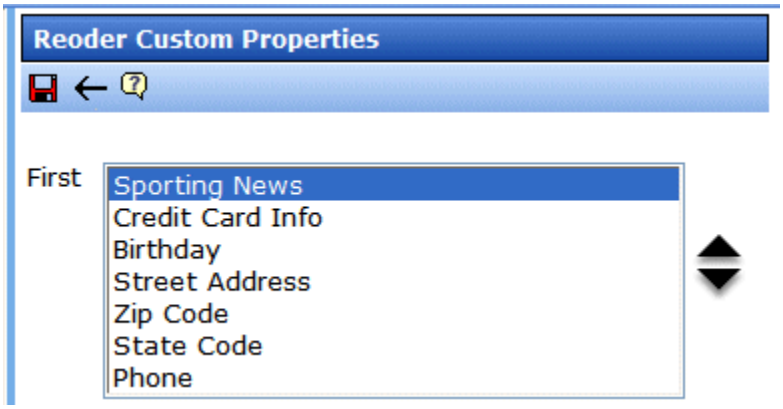


4. Click **OK**.
5. The View Custom Properties screen appears, and the property is no longer available.

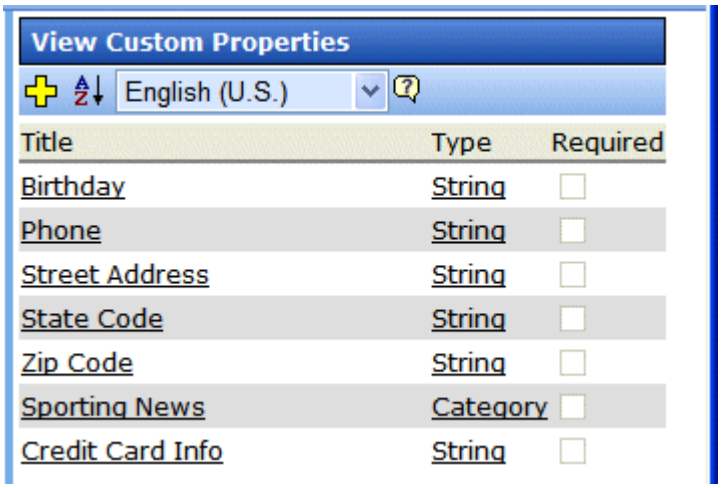
Setting the Custom User Properties Order

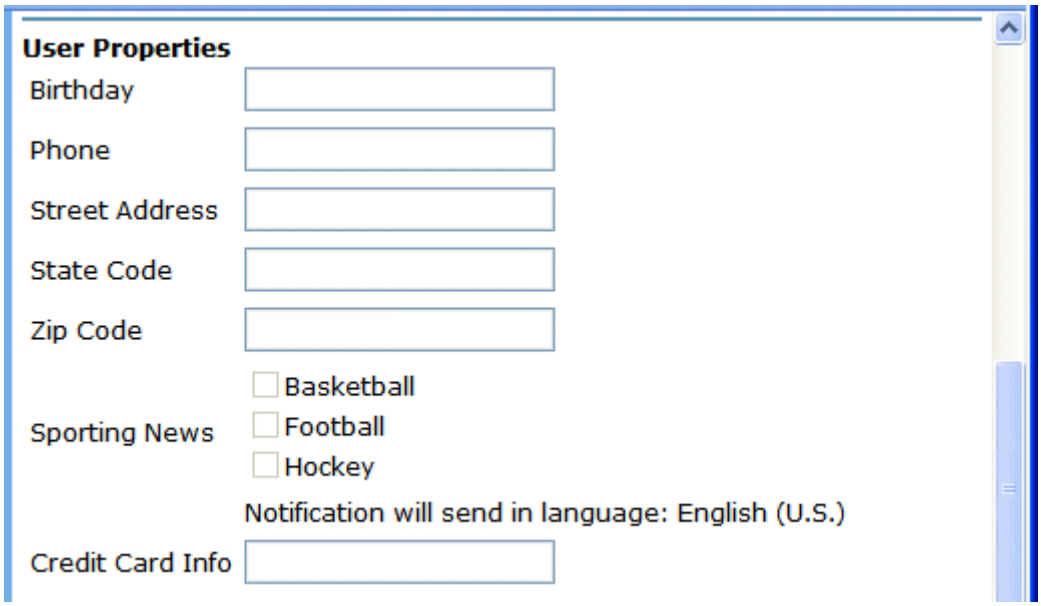
From the View Custom Properties screen, you can set the order in which the properties appear on the User and Membership Users Properties screen. To set the custom user properties order, complete these steps.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.
2. Click the **Reorder** button ( ).
3. The Reorder Custom Properties screen appears.



4. Click a property.
5. Click the **Up** or **Down** arrows ( ) to move the property up or down the list.
6. Click the **Save** button ( ).
7. On the View Custom Properties screen, you now see the properties in the new order. If you go to the User or Membership User Properties screen, the order of the properties there now reflects the changes.





Using Custom User Properties for Non-English Languages

Like content, custom user properties have a language attribute. This is useful if you have users or membership users that only use a specific language. It can also be used if you want a custom user property to appear in the language in which the user is signed in.

Unless a language other than English is defined for a custom user property, the property defaults to the English version. For example, if you have two properties called Birthday and Phone Number in English and you can translate the French version of Birthday to Anniversaire, when you view the properties in French, you see the English version of Phone Number and the French version of Birthday.

Create a Custom User Property for a Non-English Language

When creating a custom user property, it must be created in English then translated to the desired language. This is done by editing the property, changing languages, filling out the Translate Custom Property Label screen and saving the property.

IMPORTANT! All custom user properties in languages other than English are tied to the English version of the property. If you delete the English version of the property, all other language versions of the properties are deleted also. However, you can remove a non-English language version of the custom properties without deleting the English version. See "Removing a Non-English Custom User Property Title" on page 772

The following steps illustrate how to translate the Title/Label of a property into French.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.
2. Choose a custom property to be defined in another language.
3. Choose a language from the language select dropdown box.

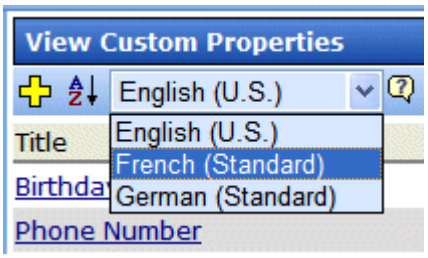
4. The Translate Custom Property Label screen appears.
5. Enter a **Label** for the property in the language you have chosen. For example, if you are creating a French version of a Birthday custom user property, you would enter Anniversaire in the label text field. For information on the Label property, see "Label" on page 760
6. Click the **Save** button ( ).

Removing a Non-English Custom User Property Title

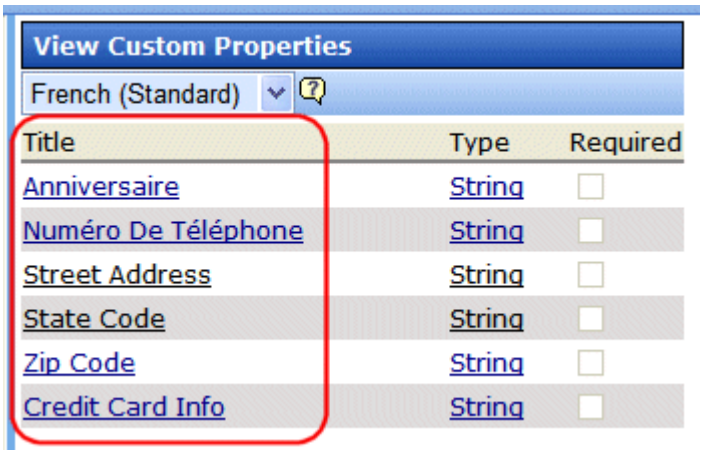
Removing a non-English version of a custom user property title does not remove the english version of the property. When you remove the non-English version of a property, you are basically removing the label for that specific language in the custom property.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.

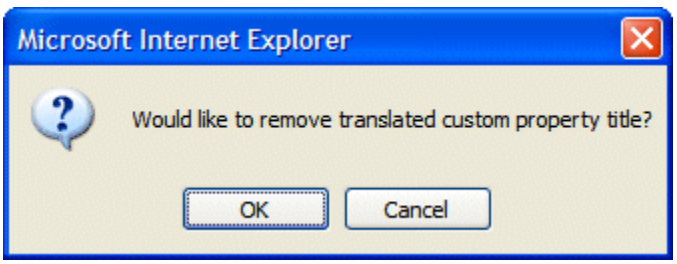
2. Choose the language in which the custom user property appears from the **Language Dropdown Box**.



3. Click the **Title** you want to delete.



4. The Translate Custom Property Label screen appears.
5. Click the **Delete** button ( ).
6. A dialog box appears asking if you would like to remove the translated custom property title.



7. Click **OK**.
8. The English version of the Edit Custom Property screen appears.
9. Click the **Back** button ( ).

WARNING! Do not click the delete button on the Edit Custom Property screen. This action deletes the English version of the custom user property. If you click the delete button, you lose all information collected by the property and all language versions of the property.

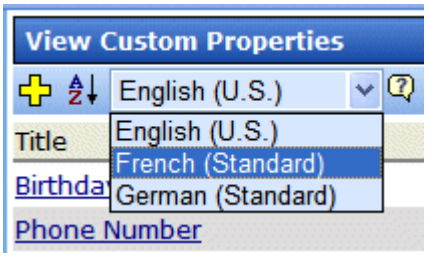
Viewing Custom User Properties By Language

From the View Custom Properties screen, you can view the custom users properties by languages. When viewing by languages, it is important to remember that if there is only an English version of the property, the English version appears in all the languages.

All custom user properties, in languages other than English, are tied to the English version of the property. If you delete the English version of the property, all other language versions of the properties are deleted.

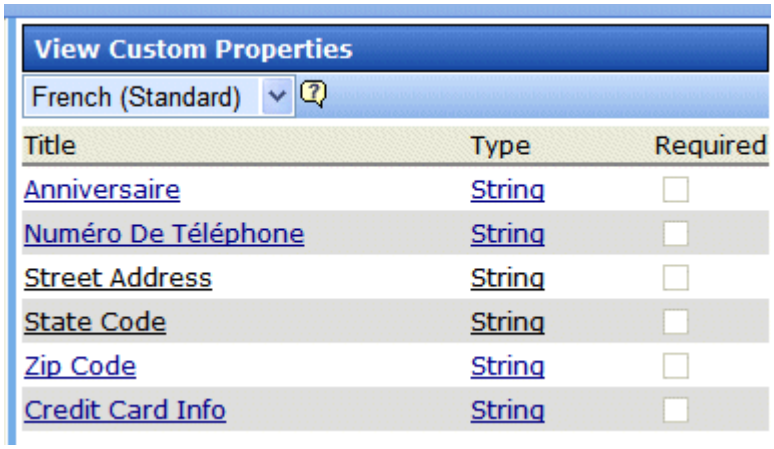
To view the custom user properties by language, follow these steps.

1. In the Workarea, click **Settings > Configuration > User Properties > User Properties**.
2. Choose the language in which to view the properties from the language dropdown box.



3. The View Custom Languages screen for that language appears.

NOTE In the example below, some properties have not been translated, so the English versions appear instead.



Setting Permissions

Permissions determine which actions users and members of user groups can perform on content, library items, and content folders. For example, you allow your Webmaster to perform the most advanced actions, such as adding folders, editing folder properties, and deleting folders. At the same time, you restrict content contributors to viewing, editing, and adding new content.

You can set permissions for a content folder or content item. When you assign permissions to a content folder, it affects all of its subfolders unless you break inheritance for a subfolder.

Permissions are explained through the following topics:

- ”Who Is Authorized to Set Permissions” on page 776
- ”Setting Permissions through the Permissions Table” on page 776
- ”Inheritance” on page 778
- ”Standard & Advanced Permissions” on page 778
- ”Setting Permissions for a Content Folder” on page 780
- ”Setting Permissions for Content” on page 784

Who Is Authorized to Set Permissions

Only Ektron CMS400.NET administrators and users identified on the Manage Members for Role: Folder User Admin screen can set permissions. *See Also:* ”Using the Roles Screens” on page 796

Setting Permissions through the Permissions Table

IMPORTANT! All members of the Administrators group are automatically granted all permissions to all Ektron CMS400.NET folders. Although these users do not appear when you view a folder’s permission settings, they have full permissions.

You manage the following permissions through the Permission Table (illustrated below).

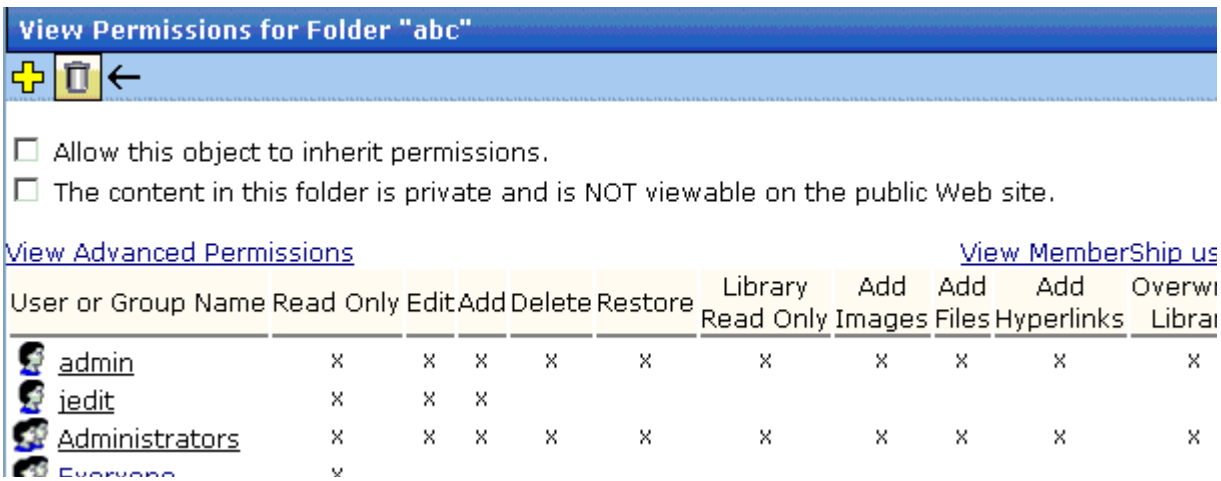
- Content management: view, add, edit, delete, restore
- Library File Management: view, add images, add other types of files, add hyperlinks, overwrite files
- Folder management: add, edit, delete, traverse
- Work with Collections and Menus

NOTE You can use the Roles screens to assign additional permissions that are not defined in the Permission Table, such as the ability to create tasks. *See Also:* "Defining Roles" on page 795

The Permission Table appears when you click the Permission button ( ) from a folder's or content item's Properties window.

Best Practice

If you need to assign multiple users the same permission, Ektron recommends placing them in a user group and assigning the group to the Permission Table. If you assign too many users in the Permission Table, your system's response time may degrade.



Inheritance

By default, all content folders and items inherit permissions from their parent folder. You have two options for modifying permissions.

- Modify the permissions of the parent folder - see ”Setting Permissions for a Content Folder” on page 780
- Break inheritance and add permissions to a folder

Breaking Inheritance

To break inheritance from a parent folder, follow these steps.

1. Access the Permissions Table for a content folder or content in your Workarea, as described in ”Accessing the Permissions Table” on page 780.
2. Remove the check mark from the box that says **Allow this object to inherit permissions**.
3. A confirmation message appears.
4. Click **OK**.

Restoring Inheritance

To restore inheritance for a content folder or content, follow these steps.

1. Access the Permissions Table as described in ”Accessing the Permissions Table” on page 780.
2. Place a check in the box that says **Allow this object to inherit permissions**.
3. A confirmation message appears.
4. Click **OK**.

Standard & Advanced Permissions

There are two categories of permissions. You assign permissions in each category from a different screen.

- Standard Permissions - basic functions

- Advanced Permissions - administrator level functions

The following table explains the permissions in Ektron CMS400.NET.

Category	Permission	Allows user/user group to perform this action on content in selected folder
Standard	Read Only	View content
	Edit	Edit content
	Add	Add content
	Delete	Delete content
	Restore	Restore old versions of content
	Library Read Only	View items in the corresponding library folder *See Also:* "Managing Library Items" on page 177
	Add Images	Upload images to the corresponding library folder
	Add Files	Upload files to the corresponding library folder
	Add Hyperlinks	Add hyperlinks to the corresponding library folder
	Overwrite Library	Overwrite images and files to the corresponding library folder

Category	Permission	Allows user/user group to perform this action on content in selected folder
Advanced	Collections	Manage collections *See Also:* "Collections" on page 634
	Add Folders	Add sub folders *See Also:* "Search Content Folder" on page 68
	Edit Folders	Edit folder properties *See Also:* "Folder Properties" on page 41
	Delete Folders	Delete the current folder or its subfolders
	Traverse Folders	Access folders under the root folder. By default, the **Everyone** user group has permission to view all subfolders. If you disable or modify the Everyone user group, and you want to grant users/groups permission to a folder other than the root folder, you must also assign Traverse permission. If you do not, the user cannot access the folder. In that case, the user cannot perform any other granted permissions.
	Modify Preapproval	Set or update a folder's preapproval group. *See Also:* "Automatic Creation of Tasks Associated with Content" on page 371

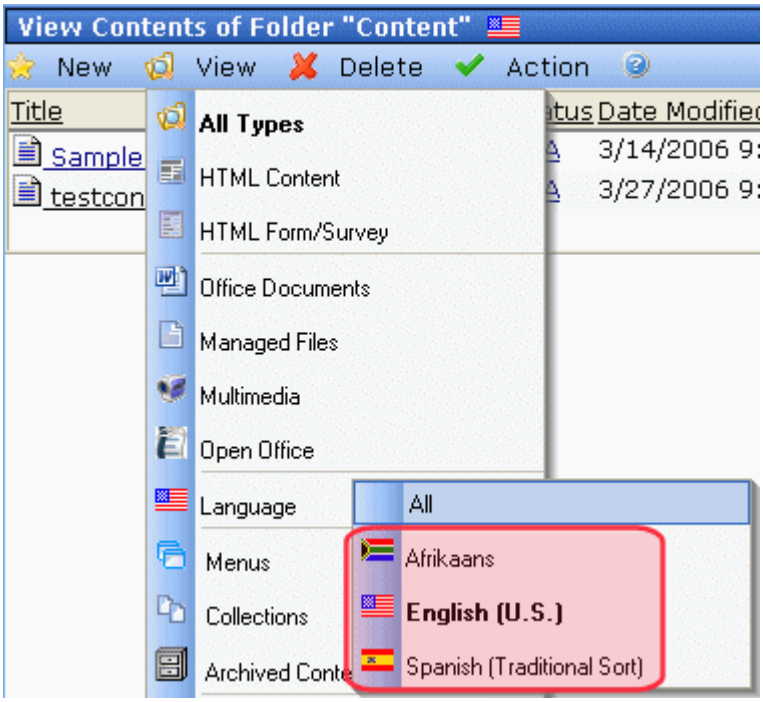
Setting Permissions for a Content Folder

You can set permissions for any content folder and language from the Folder Properties screen. Here is the Permissions button on the Folder Properties screen.

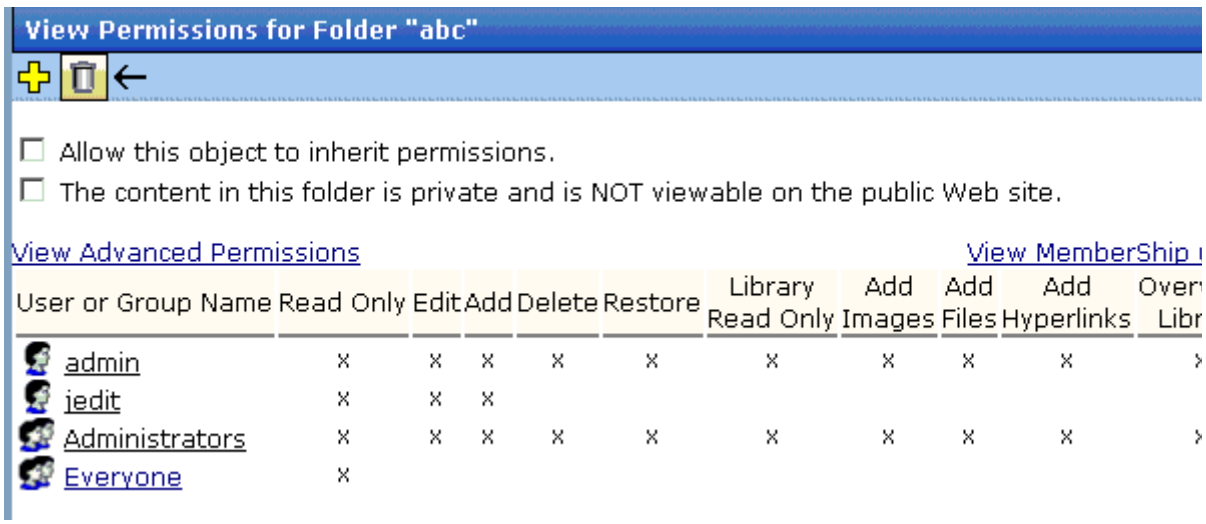
Accessing the Permissions Table

To access the Permissions Table, follow these steps.

1. Select a content folder from the left frame of the Workarea.
2. Click **View**.
3. From the language dropdown, select the language whose folder properties you want to update.



4. Click **View > Folder Properties**. The Folder Properties screen appears.
5. Click the Permissions button ( ).
6. The Permissions Table appears.



The Permissions Table displays each user's abilities to perform actions on content within the selected folder. Since all permissions cannot fit on one screen, you can click **View Advanced Permissions** to see the other group.

After viewing the permissions, you can change them. Below is a list of actions you can perform from this screen.

Actions You Can Perform from the Permissions Table

The following table summarizes actions you can perform from the Permission Table screen.

Action	How to perform it	For more information, see
View advanced permissions	Click **View Advanced Permissions**	"Standard & Advanced Permissions" on page 778
Add user or group to permission table	Click	"Adding a User or User Group to the Permissions Table" on page 783
Remove user or group from permission table	Click	"Deleting Users or User Groups from the Permissions Table" on page 784
View membership users	Click **View MemberShip users**	"Community Folders" on page 50
Have this folder inherit permissions from parent folder	Check box next to **Allow this object to inherit permissions**	"Inheritance" on page 778
Make content in this folder private	Check box next to **The content in this folder is private and can only be viewed by authorized users and members** Note: If **Allow this object to inherit permissions** is checked, you cannot check this box. In that case, this folder is inheriting this setting from its parent folder.	"Private Content" on page 752

Adding a User or User Group to the Permissions Table

To add a user or user group to the Permissions Table, follow these steps.

NOTE Before adding users or groups, you must break inheritance. See "Inheritance" on page 778.

NOTE If a user and the user group to which that user belongs are both given permission to a folder, the user has all permissions to which he/she is assigned as well as permissions assigned to the user group.

NOTE You can only assign Read Only permission to a Membership user or user group. *See Also:* "Membership Users and Groups" on page 735

1. Access the Permissions Table for the content folder or content, as described in "Accessing the Permissions Table" on page 780.
2. Click the Add button ( ).
3. The Add Permissions screen appears. Only users and groups not assigned to the Permissions Table appear.
4. Click a user or group to add to the Permissions Table.
5. The Add Permissions screen appears.
6. Check the standard and advanced permissions for the user or group. Refer to "Standard & Advanced Permissions" on page 778 for a description of permission options.

NOTE Check **Enable All** to assign all standard permissions. If you do, you still must assign advanced permissions by hand.

7. Click the Save button ( ).

Editing User or User Group Permissions

To add or remove permissions for a user or group, editing the user or group in the Permissions Table. To do so, follow these steps.

1. Access the Permissions Table for the content folder or content, as described in "Accessing the Permissions Table" on page 780.

2. Click the user or group for which you want to edit permissions.
3. The Edit Permissions screen appears.
4. To assign any permission, check the box. To remove any permission, uncheck the box.

NOTE Remember to toggle between standard and advanced permissions.

5. Click the Update button ( ).

Deleting Users or User Groups from the Permissions Table

To remove permissions from a user or user group, use the Delete button on the View Permissions window. To do so, follow these steps.

1. Access the Permissions Table for the content folder or content, as described in "Accessing the Permissions Table" on page 780.
2. Click the Delete button ( ).
3. The Remove Permissions screen appears.
4. Click the user or group to remove from the Permissions Table.
5. A confirmation message appears.
6. Click the **OK** button.

NOTE When you delete the permissions of a user or user group, that change is propagated to all subfolders and content. Also, if the user or group was part of an approval chain, they are removed from it.

See Also: "Setting Permissions" on page 776

Setting Permissions for Content

You can assign permissions to a single content item, overriding the default permissions inherited from the folder. To do so, follow these steps.

1. Access the content by navigating to its folder, selecting a language, and clicking on it.

2. Click the View Permissions button ( ).
3. Uncheck the box next to **Allow this object to inherit permissions**.
4. A confirmation message appears. Press **OK**.
5. You can perform any action on the content that you can perform on a folder. These options are described in ”Actions You Can Perform from the Permissions Table” on page 782.

Setting Approval Chains

What is an Approval Chain?

An approval chain is a series of users or user groups who must approve content before it can be published on your Web site. When the last person in the chain approves content, it goes live.

Also, if a user deletes content, before it can be removed from **Ektron CMS400.NET**, it must pass through the approval chain before it is deleted.

An approval chain can include any number of users or user groups. However, to be eligible, a user or user group *must* have permissions to the content folder or content item. *See Also:* ”Setting Permissions” on page 776

NOTE If you assign a user group to an approval chain, only *one member* of the group needs to approve the content, not all members.
Also, if a user appears in an approval chain twice (both as a user and part of a user group), the approval chain skips the second approval because the user has already approved the content.

You can set up an approval chain for a content folder or a content item as well as a language. *See Also:* ”Multi-Language Approval Chains” on page 903

Finally, the *Approval Method* determines if content must be approved by all users in the chain, or only users higher up the chain than the one making the edits.

This chapter explains how to manage approval chains through the following subtopics.

- ”Examples of Approval Chains” on page 787
- ”Inheritance and the Approval Chain” on page 787
- ”Creating an Approval Chain for a Content Folder” on page 788
- ”Editing an Approval Chain For Content” on page 792
- ”The Approval Method” on page 792

NOTE Only Ektron CMS400.NET administrators and users identified on the Manage Members for Role: Folder User Admin screen can modify the approval chain.

Examples of Approval Chains

An approval chain lets you control how and when your Web site is updated. For example, if your Webmaster needs to approve every new content item or update of an existing item, he would be last user in every approval chain and exert total control over the site.

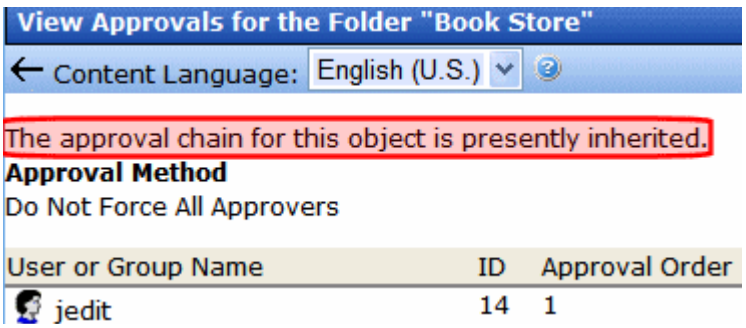
Alternatively, you could set up a less centralized organization, where each department head controls his section. To accommodate this, set up an approval chain for each department, and assign the department head as the last person in the chain.

On the opposite extreme, you can delete the approval chain for a content item or folder. In this case, every item in that folder is published as soon as a user submits it for publication.

Inheritance and the Approval Chain

An approval chain's inheritance is determined by the corresponding permission table. So, if a folder's permission table inherits settings from its parent folder, that folder's approval chain also inherits. To learn about enabling and disabling permission table inheritance, see "Inheritance" on page 778.

The Approval Chain screen only displays its inheritance status; it does not let you set it.



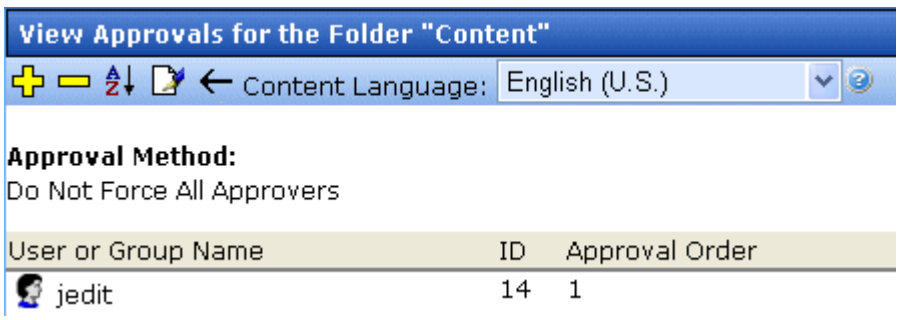
Creating an Approval Chain for a Content Folder

Before you can create or edit an approval chain, you must access the View screen.

Viewing a Folder's Approval Chain

To view a folder's approval chain, follow these steps.

1. Select a folder from the left frame of the Workarea.
2. Click **View > Language**.
3. Select the language of the approval chain you want to view.
4. Click **View > Folder Properties**.
5. Click the Approvals button ( ).
6. The approval chain appears in the lower section of the screen.



This screen shows the following information about the approval chain.

- its language
- every user and user group in the approval chain
- the approval order
- the approval method (*See also:* "Changing the Approval Method" on page 793)
- toolbar buttons for modifying the approval chain and method

Actions You can Perform from the Approvals Screen

From this screen, you can perform these actions.

Action	Button	See this section for details
Add approvers		"Adding Approvers" on page 789
Remove approvers		"Deleting Approvers" on page 791
Change the order of users in the approval chain		"Editing the Approval Order" on page 790
Change the approval method		"Changing the Approval Method" on page 793
Change the language of the approval chain	**Content Language**	"Multi-Language Approval Chains" on page 903

Adding Approvers

To add a user or user group to the approval chain, follow these steps.

1. Access the approval table, as described in "Viewing a Folder's Approval Chain" on page 788.
2. Select the language of the approval chain. The chain only applies to content in this language.
3. Click the Add button ( ).
4. The Add Approvals screen appears.

NOTE Only users and user groups with permissions to the folder appear. See "Adding a User or User Group to the Permissions Table" on page 783 for more information.

Best Practice

Ektron suggests assigning user groups to the approval chain, as opposed to individual users. In this way, if someone is out of the office for a day, another group member can approve the content.

5. Click the user or user group to add to the approval chain.
6. A confirmation message appears.
7. Click **OK**.

NOTE If you assign a user group to an approval chain, any member of the group can approve the content, not all members.

Editing the Approval Order

After you assign approvers to a folder, you may want to adjust the approval order. Place the user or group with final review at the end of the approval chain (that is, *the highest number*).

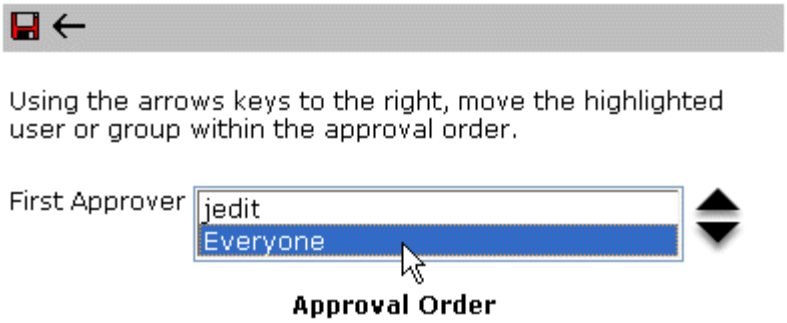
For example, if you have a content contributor whose edits must be approved by a department head, and the Webmaster has final review of all content, the approval order would look like this.

User or Group Name	Approval Order
Content contributor	1
Department Head	2
Webmaster	3

To edit the approval order, follow these steps.

1. Access the approval table as described in ”Viewing a Folder’s Approval Chain” on page 788.
2. Select the language.
3. Click the Reorder button ( ).
4. The Edit Approval Order screen appears.

5. Click the user or group whose approval order you want to change.


Using the arrows keys to the right, move the highlighted user or group within the approval order.
First Approver
jedit
Everyone
Approval Order

6. Click the Up (▲) or Down (▼) arrow to move the user or group to the desired order.
7. Click the Save button ( ).

Deleting Approvers

NOTE If a user in an approval chain is deleted from the permissions table, he or she is automatically deleted from the approval chain.

To delete a user or user group from an approval chain, follow these steps.

1. Access the approval table as described in ”Viewing a Folder’s Approval Chain” on page 788.
2. Select the language.
3. Click the Remove button ( ).
4. The Remove Approval screen appears.
5. Click the user or group that you want to remove from the approval chain.
6. A confirmation message appears.
7. Click **OK**.

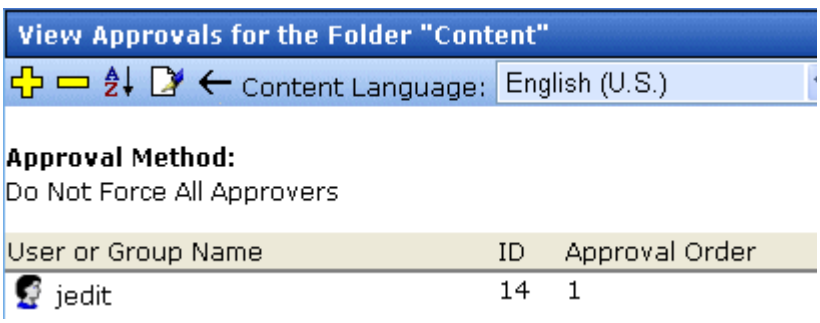
Editing an Approval Chain For Content

At times, you may need to change the approval chain for a specific content item. Use the Approvals button ( ) on the View Content screen to change a content item's approval chain.

Viewing an Approval Chain for Content

To view the approval chain for content, follow these steps.

1. Navigate to the folder that contains the content.
2. Click the content.
3. Click the View Approvals button ( ).
4. Uncheck the checkbox next to **Allow this object to inherit permissions**.
5. Return to the View Content screen.
6. Click the Approvals button ( ).
7. The content's approvals table appears.



After viewing the content's approval chain, you can perform the same actions on it as you can perform on a folder. This list of actions is available from "Actions You can Perform from the Approvals Screen" on page 789.

The Approval Method

The Approval Method determines if content must be approved by all users in the chain, or only users higher up in the chain than the user making the edits. The approval method only affects the approval process if the person submitting content for publishing is a member of the approval chain.

Two approval methods are available.

Approval Method	Description
Force All Approvers	*All* users in approval chain must approve the content, beginning with the first
Do Not Force All Approvers	Approvers *after the user submitting content* in the approval chain must approve the content

For example, assume the approval chain is set as below.

User or Group Name	Approval Order
Content contributor	1
Department Head	2
Webmaster	3

If the Approval Method is **Force All Approvers**, and the Department Head submits content, the content must be approved by the content contributor, then the department head, and the Webmaster before it is published.

If the Approval Method is **Do Not Force All Approvers**, and the Department Head submits content, the content must only be approved the Webmaster before it is published.

Changing the Approval Method

By default, the approval method is set to **Do Not Force All Approvers**. To change the approval method for a content folder or item, follow these steps.

1. Access the approval table, as described in ”Viewing a Folder’s Approval Chain” on page 788.
2. Click the Edit button ( ).
3. The Edit Approval Method screen appears.
4. Select an approval method by clicking the radio button.

5. Click the Save button ( ).

Defining Roles

Ektron CMS400.NET contains an Administrators User Group. Any user who is a member of that group automatically has full administrator privileges. *See Also:* ”Guidelines for Using The Folder-User Admin Role” on page 798

The Roles feature lets you assign *limited* or *specific* administrator privileges to users who should not have full administrator privileges. For example, you can let certain users create, redirect, or remove tasks but deny them other privileges normally granted to administrators.

Best Practice

When creating new user groups to use with roles, assign names as a mnemonic aid for the role, especially for folder-specific rules. For example, the Marketing Folder Admins user group could be used for all role members who can administer the marketing folder.

NOTE The Permissions Table lets you control which users can manage a folder’s properties, its content, library items, and create or edit collections. (*See Also:* ”Setting Permissions” on page 776) So, together, the Roles feature and the Permission Table give you the ability to assign administrative privileges to users who are not members of the Administrators group.

This section explains the use of Roles through the following topics.

- ”Using the Roles Screens” on page 796
- ”Guidelines for Using The Folder-User Admin Role” on page 798
- ”Using the Roles Screens” on page 796
- ”List of Administrator Privileges” on page 801

Using the Roles Screens

Use the Roles screens to assign limited administrator privileges. To access the Roles screens, go to the **Ektron CMS400.NET** Workarea and select **Settings** > **Roles**.

NOTE In the screens listed below, you can select users or groups. However, you can never select the Administrators group, because that group already has all permissions.

The following table describes the Roles screens.

Screen	Lets you give a user or user group the ability to	For more information, see
Alias-Admin	This user has all the permissions that a member of the administrators group has, such as the ability to • Turn aliasing on and off • View all manual aliases • Activate or deactivate manual aliases • Change the primary alias • Create automatic aliases • Create RegEx aliases	
Alias-Edit	• View and assign a manual alias to content • View secondary aliases	”Permissions for Working with Aliasing” on page 588
Calendar- Admin	Create, edit and delete calendars	”Calendar Permissions” on page 550
Collection and Menu Admin	Create, edit and delete Collections and Menus via the **Modules** tab. Note: To manage permissions for creating collections and menus via the folder’s New > Collection or New> Menu option, use folder permissions. *See Also:* ”Setting Permissions” on page 776	”Collection Permissions” on page 635; ”Menu Feature” on page 712
Collection Approver	If approval is required for a collection, approve changes to it, including the deletion of a collection.	”Setting up Approval for Collections” on page 638

Screen	Lets you give a user or user group the ability to	For more information, see
Commerce Admin	Access the eCommerce Module's screens in the **Ektron CMS400.NET** Workarea.	"eCommerce" on page 1086
Community Group Admin	Create, edit and delete and manage all Community Groups.	"Community Groups" on page 950 and the Developer Manual section > "Introduction to Server Controls" > "Community Platform Server Controls"
Community Group Create	Create and manage Community Groups. A user with this role can only manage community groups he has created.	"Community Groups" on page 950 and the Developer Manual section > "Introduction to Server Controls" > "Community Platform Server Controls"
Metadata-Admin	View, create and edit metadata definitions	"Metadata" on page 118
Business Rule Editor	Create or edit Business Rules and Rulesets	"Business Rules" on page 620
Smart Forms Admin	Create or edit Smart Forms	"Working with Smart Forms" on page 181
Synchronization Admin	Access the **Workarea > Settings > Configuration > Synchronization** screen, which lets the user set up an run an eSync.	"Using eSync" on page 1303
Task Create	Create tasks	"Task Permissions" on page 361
Task Delete	Delete tasks	"Task Permissions" on page 361
Task Redirect	Redirect tasks	"Task Permissions" on page 361
Taxonomy Administrator	Create and manage taxonomies	"Taxonomy" on page 642
Template Configuration	View, create, update, and delete system templates	"Creating/Updating Templates" on page 70
User-Admin	Create, view, edit, and delete users and user groups	"Managing Users & User Groups" on page 720
XLIFF-Admin	Use the Language Xport feature, which copies content into XLIFF files that can be submitted to a translation agency.	"Using the Language Export Feature" on page 890

Screen	Lets you give a user or user group the ability to	For more information, see
Taxonomy Administrator	View, create, update, and delete taxonomies and their categories	"Taxonomy" on page 642
Message Board Admin	A user with this role can approve pending comments or delete existing comments on a message board. Message board comments for users and community groups are administered on the Web site. Message Board comments for content can be administered on the Web site or from the Content Report screen in the Workarea.	"Content Rating" on page 91 and the Developer Manual section "Introduction to Server Controls" > "Community Platform Server Controls" > "MessageBoard Server Control"
Synchronization Admin	Perform all synchronization activities: • manage sync configurations and profiles • run a sync • perform content and folder-level sync	"Using eSync" on page 1303
Folder-User Admin	View and edit folder properties. These users can update properties, permissions, the approval chain, metadata, Web alerts, purge history, etc. For example, create a user group and give it permission to manage the top-level marketing folder. Members of the group can do everything to that folder and its subfolders, but lack authority over other folders. *See Also:* "Guidelines for Using The Folder-User Admin Role" on page 798	"Folder Properties" on page 41
Custom Permissions	Would be used by a developer when extending **Ektron CMS400.NET**'s standard features.	"Guidelines for Using a Custom Role" on page 799

Guidelines for Using The Folder-User Admin Role

When setting up users and groups for administrative access over folders, keep these in mind.

- After being identified on the Manage Members for Role: Folder User Admin screen, users or groups must also be given at least Read-Only permission for individual folders on the **Folder Properties** > **View Permissions for Folder** screen. *See Also:* ”Setting Permissions” on page 776
- You *must* use the same identity on the Manage Members for Role: Folder User Admin and Folder properties screens. So, if a user group is listed for the role, use the same group when assigning folder permissions, not simply a group member. Conversely, if individual users are listed on the role screen, they must be specified in the folder permission.
- Ektron *strongly* recommends adding only user groups to the Folder User Admin role, not individual users.

  If you set up an individual user as a role member, he could accidentally receive administrative rights to other folders.

Guidelines for Using a Custom Role

NOTE The developer sample page installed with the sample site (`http://site root/cms400developer/developer/default.aspx`) demonstrates how to use custom roles. From the home page, click **Roles > Custom Roles**.
To download the developer sample site, go to `http://www.ektron.com/solutions/startersites/`.

The custom permissions role lets your Web developer create a site page, and then restrict access to that page’s content (or areas with a page) to users assigned to a custom role.

Items you could show and hide could be as simple as a content block. But they could be more complicated, such as displaying buttons and fields for one user group, and something completely different for another.

Custom roles have no effect inside the workarea.

Examples of Custom Roles

- Most of your site visitors belong to different political parties, while some are not registered with any party. By checking the user’s ID against custom roles, you could present registered voters with selections for their party’s primary, and prevent unregistered voters from participating.

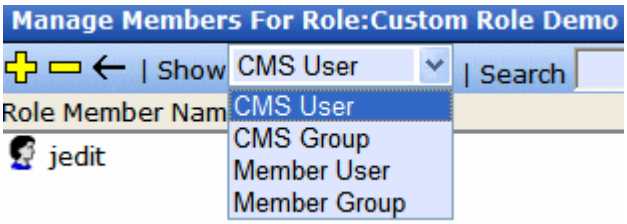
- Your CMS site visitors fall into two categories: suppliers and buyers. You could check the current user against a custom role and show buyers one set of data and suppliers a different set.
- On your eCommerce site, registered students see a list of coupons that are not displayed for anyone else. Or, only registered adults can order age-controlled items, such as tobacco or alcohol.
- Control your pages' background colors, images, and skins based on custom roles. For example, mothers get family-oriented background images while teenagers get rock images and related styling.

Steps for Setting up a Custom Role

To set up a custom role, follow these steps.

1. Set up user groups and add to them users who will have some level of access to the custom page. *See Also:* "Creating a New User Group" on page 731

   To continue the above example, create one group of auditors (who will have read-only access), and another group of administrators (who will have edit access).
2. Create an **Ektron CMS400.NET** folder to hold the content that will appear on the custom page. Use the folder's permission table to assign users and groups appropriate access to the folder's content. *See Also:* "Setting Permissions" on page 776
3. Set up a Custom role. To do this, go to **Workarea > Settings > Roles > Custom Permissions**.
4. Create a new role.
5. From the Manage Custom Roles screen, click the role you created.
6. From the user type selector, click the type of users you want to add to the role.



7. Click the Add button ( ).
8. Check the box next to the users or groups that you want to add to the role.
9. Your Web developer creates the custom page. *See Also:* "Information about Custom Roles for your Developer" on page 801
10. You create content to appear on the custom page. Place the content in the folder you created in Step 2.

Information about Custom Roles for your Developer

The API provides two methods that determine if the current user is logged in, and if he is a member of the Administrators group. The methods let you test customizable roles with conditions outside the standard Is-Logged-In / Is-Admin tests.

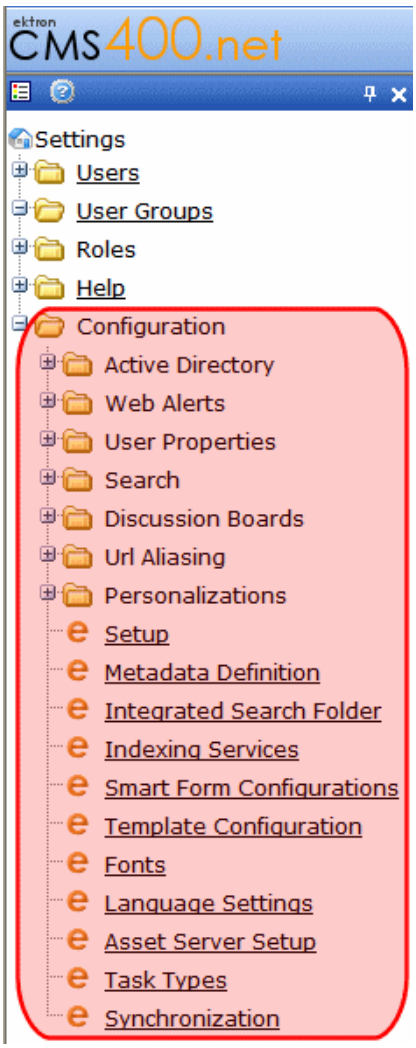
API methods are listed below.

Method	Returns
`GetRolePermissionSystem(RoleName As String, nUserId As Long)`	a Boolean value indicating if the user belongs to the system-wide custom role
`GetRolePermissionFolder(RoleName As String, nFolderId As Long, nUserId As Long)`	a Boolean value indicating if the user belongs to the custom role for the given folder. The procedure for assigning a user to a custom role is "Guidelines for Using a Custom Role" on page 799

Usage is demonstrated in the Developer sample file *site root*`\CMS400Developer\Developer\Roles\CustomRoles.aspx.vb`.

List of Administrator Privileges

Administrator privileges include access to most screens that appear when you select **Settings** > **Configuration** from the lower left panel of the Workarea (illustrated below).



Administrators can also

- edit folder properties (including Web alerts, metadata, permissions, and the approval chain)
- manage aliasing features, such as turn aliasing on or off, activate and deactivate manual aliases, and create automatic aliases
- manually alias content
- add, edit, or delete a calendar

- add, edit, or delete a business rule
- create, view, edit, and delete metadata definitions
- create, view, edit, and delete taxonomies
- create, redirect, and delete tasks
- require a collection to go through an approval process
- export content for translation to another language using XLIFF
- run an eSync
- access the eCommerce Module

Active Directory Feature

The Active Directory feature allows you to retrieve user and user group information from the Microsoft Windows Active Directory (AD) into Ektron CMS400.NET. As a result, you can administer user information from one place only, and users need to remember only one password/username combination to sign on to the network and Ektron CMS400.NET.

To learn more about Active Directory, see http://www.microsoft.com/windowsserver2003/technologies/directory/activedirectory/default.mspx.

This feature is described through the following top-level topics.

- ”Setup Guidelines” on page 805
- ”Implementing Active Directory Integration” on page 808
- ”Active Directory Integration” on page 808
- ”User Authentication Only Mode” on page 841
- ”Logging into a System that Uses AD Integration” on page 845

Setup Guidelines

WARNING! Ektron strongly recommends configuring a secure socket layer (SSL), especially if you are using Active Directory Integration. SSL encrypts passwords that are otherwise sent as clear text to the Ektron CMS400.NET server. See SSL Support in the **Ektron CMS400.NET** Setup Manual for more information.

The two ways to set up Active Directory are contrasted in the table below. Below the table are instructions for each setup option.

Method	When to Use	How setup is done
Advanced Domains	• You are using a firewall • The **Ektron CMS400.NET** server need not be part of an Active Directory domain • You are connecting to multiple Active Directory domains, even ones that do not see each other	**Ektron CMS400.NET** Workarea. For setup instructions, see "Setting Up Active Directory via the Advanced Domains Method" on page 805.
Legacy	You are using auto discovery and Active Directory single signon.	The domain connects to the AD domain within the web.config. For setup instructions, see "Setting Up Active Directory via the Legacy Method" on page 806

Setting Up Active Directory via the Advanced Domains Method

1. Make sure each AD user to be used in Ektron CMS400.NET is defined correctly in the Active Directory. Remember that, when you enable AD integration, logon name and domain are copied from AD to Ektron CMS400.NET.

2. If you have multiple domains in your Active Directory Forest, decide if you want Ektron CMS400.NET to reference all domains or if you want to choose a specific one. (You will use this when completing the **Domain** field of the Active Directory Setup Screen.)
3. Set the following elements in the Web.config.

   - Set the `ek_ADEnabled` element to **true**. It should look like this:

   ```
   <add key="ek_ADEnabled" value="true"/>
   ```

   - Set the `ekADAdvanced` element to **true**. It should look like this:

   ```
   <add key="ekADAdvanced" value="true"/>
   ```

   - Set the `ek_AUTH_Protocol` element to **LDAP**. It should look like this:

   ```
   <add key="ek_AUTH_Protocol" value="LDAP"/>
   ```

4. Set up your domains on the Edit Domains screen. See "The Edit Domains Screen" on page 823.
5. Configure the AD setup page. See "The Active Directory Setup Screen" on page 826.
6. Assign AD groups to **Ektron CMS400.NET** user groups. See "Copying User Groups from AD to Ektron CMS400.NET" on page 812.

Setting Up Active Directory via the Legacy Method

1. Make sure each AD user to be used in Ektron CMS400.NET is defined correctly in the Active Directory. Remember that, when you enable AD integration, logon name and domain are copied from AD to Ektron CMS400.NET.
2. If you have multiple domains in your Active Directory Forest, decide if you want Ektron CMS400.NET to reference all domains or if you want to choose a specific one. (You will use this when completing the **Domain** field of the Active Directory Setup Screen.)
3. Set the following elements in the Web.config.

   - For the `authentication` element, change the value of the `impersonate` attribute to **false**. It should look like this:

   ```
   <identity impersonate="false" userName="" password=""/>
   ```

   - Set the `ek_ADEnabled` element to **true**. It should look like this:

   ```
   <add key="ek_ADEnabled" value="true"/>
   ```

- Make sure the `ekADAdvanced` element is set to **false**. (This is the default value.)

- Set the `ek_AUTH_Protocol` element to **GC**. It should look like this:

```
<add key="ek_AUTH_Protocol" value="GC"/>
```

- declare a domain account through `ek_adusername` and `ek_adpassword`. It should look like this:

```
<add key="ek_ADUsername" value="[username]@domain" />
<add key="ek_ADPassword" value="YourPasswordHere" />
```

NOTE Before entering the password, encrypt it using Ektron's password encryption utility. To access that utility, go to the Windows **Start** menu **> All Programs > Ektron > *current release* > Utilities > Encrypt Email Password**.

4. Configure the AD setup page. See "The Active Directory Setup Screen" on page 826.
5. Assign AD groups to **Ektron CMS400.NET** user groups. See "Copying User Groups from AD to Ektron CMS400.NET" on page 812.

Implementing Active Directory Integration

The Active Directory feature has two implementation modes, described in the following table. Choose the mode that best meets your needs.

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Mode	Information Shared between AD and CMS	How to Implement	For more information, see
user authentication only	• user logon name • domain • password	On the Active Directory Setup screen, check **Enable Active Directory authentication**.	”User Authentication Only Mode” on page 841
active directory integration	• user logon name • domain • password • user’s first and last name • email address • user groups • user’s group memberships	On the Active Directory Setup screen, check **Enable Active Directory authentication** and **Enable Active Directory integration**. You may also want to check **Enable automatic addition of user from AD** and **Enable automatic addition of user to groups**.	”Active Directory Integration” on page 808

Active Directory Integration

This section covers the following topics:

- ”How Information is Transferred from AD to Ektron CMS400.NET” on page 809
- ”Which Information is Transferred from AD to Ektron CMS400.NET” on page 809

- ”Copying User Group Information from AD to Ektron CMS400.NET” on page 812
- ”Associating User Information in AD with Ektron CMS400.NET” on page 818
- ”The Screens of the Active Directory Feature in Active Directory Integration Mode” on page 822
- ”Disabling AD Integration” on page 840

How Information is Transferred from AD to Ektron CMS400.NET

Ektron CMS400.NET does not write to the AD – it only reads from it. This results in the following changes to how user information is handled within Ektron CMS400.NET.

- Once you enable AD integration, all changes to user and user group information must be made in the AD -- the Ektron CMS400.NET Edit User and User Group screens change to primarily view screens.
- When adding a new user or user group to Ektron CMS400.NET, you can only select users and groups in the AD. If the user or user group does not exist in the AD, create them there first, and then import the user or group into Ektron CMS400.NET.

Which Information is Transferred from AD to Ektron CMS400.NET

Ektron CMS400.NET accesses the following AD user information.

- Authentication (password, user logon name, and domain) for signing in to Ektron CMS400.NET.

  The password is not stored in Ektron CMS400.NET – the application only refers to the password during sign in.
- User information, listed in the following table

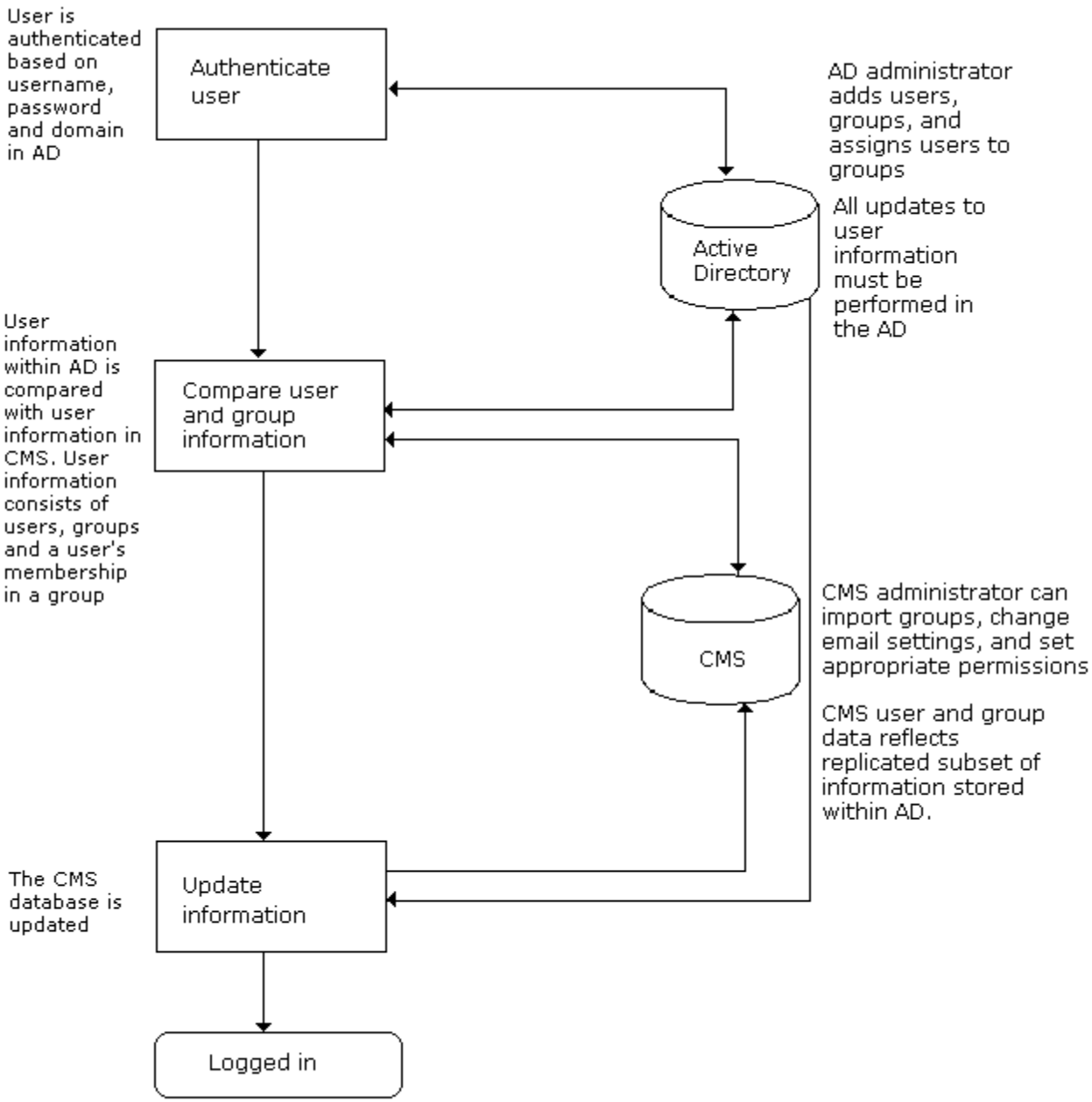
Field in AD	AD attribute	Corresponding field in Ektron CMS400.NET

User logon name (pre-Windows 2000)	sAMAccountName	Domain and Username Note: Users can share a name in different domains. For example, juser/example.com and juser/example.net. Otherwise, user names must be unique.
Last Name	sn	Lastname
First Name	givenName	Firstname
Email	mail	email Address

- user group information, listed in the following table.

Field in AD	AD attribute	Corresponding field in Ektron CMS400.NET
Group Name (pre-Windows 2000)	cn	Domain and User group name Note: User groups can share a name in different domains. For example, editors/example.com and editors/example.net. Otherwise, user group names must be unique.

The following diagram illustrates the components of the Active Directory feature.


User is authenticated based on username, password and domain in AD
Authenticate user
AD administrator adds users, groups, and assigns users to groups
Active Directory
All updates to user information must be performed in the AD
User information within AD is compared with user information in CMS. User information consists of users, groups and a user's membership in a group
Compare user and group information
CMS
CMS administrator can import groups, change email settings, and set appropriate permissions
CMS user and group data reflects replicated subset of information stored within AD.
The CMS database is updated
Update information
Logged in

Overview of Active Directory Integration

Copying User Group Information from AD to Ektron CMS400.NET

This section explains how a user's group membership is copied from the AD to the Ektron CMS400.NET system when integration is first enabled, and then on an ongoing basis. Once assigned to a group, the user automatically receives all Ektron CMS400.NET privileges and workflow responsibilities associated with it.

NOTE The Active Directory has two kinds of user groups: security and distribution. Ektron CMS400.NET does not distinguish between them – as long as a user is a member of either kind of group, group information is imported to Ektron CMS400.NET.

This section explains the following topics.

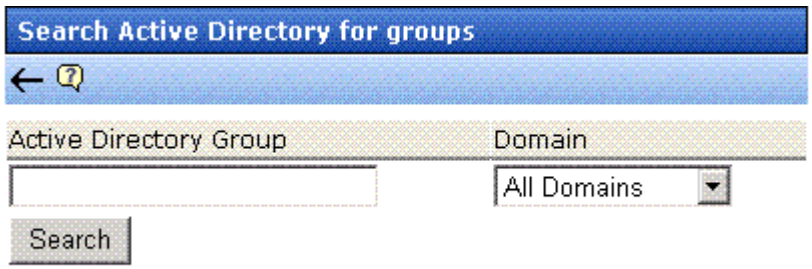
- "Copying User Groups from AD to Ektron CMS400.NET" on page 812
- "Associating a User's AD Group Information with Ektron CMS400.NET" on page 813
- "Mapping the Administrator Group" on page 815
- "User Belongs to AD Group that Does Not Exist in Ektron CMS400.NET" on page 816
- "User Belongs to Ektron CMS400.NET Group that Does Not Exist in AD" on page 816
- "Removing Users from a Group" on page 817
- "Adding User Groups" on page 817
- "Adding a User to a Group" on page 817
- "Replacing a User Group" on page 817
- "Deleting a User Group" on page 817

Copying User Groups from AD to Ektron CMS400.NET

Before using the AD integration feature, copy all AD groups you will use in your Web site into Ektron CMS400.NET. To do that, follow these steps.

1. From the left side of the Workarea, click **Settings > User Groups**.
2. Click the Add Groups button ( ).

3. The Search Active Directory for Groups screen appears.



4. From the **Domain** drop-down list, select the domain from which you want to add a user group.

NOTE The Active Directory Setup screen can restrict AD integration to one domain. If it does, you can only search within that domain.

5. Enter as much information as you know into the Active Directory Group field.
6. Click the **Search** button.
7. A new screen displays all groups that satisfy the search criteria.
8. Click the check box under the **Add** column to add the user group to Ektron CMS400.NET.
9. Click the Save button ( ).

Associating a User's AD Group Information with Ektron CMS400.NET

When Integration is First Enabled

Ektron CMS400.NET User Database Already Exists

If **Auto Add User To Group** is checked (on the Active Directory Setup screen), a user's group membership is first copied from the AD to Ektron CMS400.NET when a user logs in or is added. At this time, any AD group memberships overwrite Ektron CMS400.NET group memberships *except* the Everyone group, to which all users belong.

NOTE The Everyone group, unlike other Ektron CMS400.NET groups, is not associated with an AD group. It is an all-encompassing group with no special permissions.

If a user belongs to an AD user group that does not exist in Ektron CMS400.NET, nothing happens because the feature assumes that all AD groups are not meaningful in Ektron CMS400.NET.

If a user belongs to an Ektron CMS400.NET user group that does not exist in AD, the discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. From these screens, you can copy the AD group information into Ektron CMS400.NET.

See Also: "Associating User Group Membership with Active Directory User Group Membership" on page 833 and "Associating Groups with Active Directory Groups" on page 833

To learn how membership is updated from then on, see "After Integration is Enabled" on page 814.

Ektron CMS400.NET is Being Installed, so No User Groups Exist

Follow the procedure described in "Copying User Groups from AD to Ektron CMS400.NET" on page 812 to copy AD user groups to Ektron CMS400.NET. As users in those groups are added to Ektron CMS400.NET, their group membership is copied from AD to Ektron CMS400.NET.

After Integration is Enabled

A user's group membership is updated in Ektron CMS400.NET when all of the following are true:

- The **Enable automatic addition of user to groups** field is checked on the Active Directory Setup screen
- A user is added to Ektron CMS400.NET or his group membership changes in the Active Directory
- The user logs in or someone clicks on the Refresh button ( ) on the user's View User Information screen

On the other hand, if **Enable automatic addition of user to groups** field is *un*checked, you can add the user to groups and remove him from groups independently of his AD group memberships.

Mapping the Administrator Group

On the Ektron CMS400.NET Active Directory Setup screen, you can identify an AD user group that maps to the Ektron CMS400.NET Administrator group.

Administrators have access to all functions documented in this documentation. (Unlike other Ektron CMS400.NET user groups, whose names are copied from the AD, the Administrator and Everyone group names cannot be changed.)

For example, if the AD has a user group named CMSAdmin whose members should have the privileges of Ektron CMS400.NET administrators, assign that group to Administrators on the Active Directory Setup screen. If such a group does not exist in AD yet, you should create it and then assign it on the Active Directory Setup screen.

Note that only one AD group can be mapped to the Ektron CMS400.NET Administrator group -- you cannot have an AD administrator group within each AD domain.

See Also: "The Active Directory Setup Screen" on page 826

User Belongs to AD Group that Does Not Exist in Ektron CMS400.NET

If user is assigned to an AD user group that does not exist in Ektron CMS400.NET, nothing happens. The AD integration feature assumes that an Ektron CMS400.NET administrator only maintains user groups that are meaningful to Ektron CMS400.NET, and not all AD groups may be meaningful to Ektron CMS400.NET.

NOTE If a user belongs to a user group that is given Membership permissions, but also to a group that has CMS permissions, the user will only receive Membership permissions if logged into Ektron CMS400.NET.

User Belongs to Ektron CMS400.NET Group that Does Not Exist in AD

If a user was a member of a user group in Ektron CMS400.NET before integration was enabled, but does not belong to that group in the AD, this discrepancy is flagged on the Active Directory Setup and Active Directory Status screens.

If the user should belong to the AD group, add the group membership within the AD. Then, refresh the user on these screens to copy AD group information into Ektron CMS400.NET.

See Also: "Associating Groups with Active Directory Groups" on page 833

Removing Users from a Group

If you delete a user from an AD group, the user is automatically removed from the associated Ektron CMS400.NET group the next time the user's information is updated (as explained in "Copying User Group Information from AD to Ektron CMS400.NET" on page 812).

Adding User Groups

Once AD integration is enabled, you can only add new user groups in the AD. In Ektron CMS400.NET, use the Search Active Directory for Groups screen to copy an AD user group to Ektron CMS400.NET. You can only add groups that do not already exist in Ektron CMS400.NET. This procedure is described in "Copying User Groups from AD to Ektron CMS400.NET" on page 812.

Adding a User to a Group

You cannot add a user to a user group within Ektron CMS400.NET -- you must do so in the Active Directory.

Replacing a User Group

If you realize that you have associated the wrong AD user group with an Ektron CMS400.NET user group, you can replace the user group. Follow these steps to do so.

1. From the left side of the Workarea, click **User Groups**.
2. Click the user group that you want to replace.
3. Click the Associate Ektron CMS400.NET Group with Different AD Group button ( ).
4. Select a group to replace the group you selected in Step 2.
5. Click the Save button ( ) to finalize the change.

Deleting a User Group

Deleting a User Group in AD

If you delete a user group in AD and users are assigned to the group within Ektron CMS400.NET, the group is not automatically

deleted in Ektron CMS400.NET. However, any Ektron CMS400.NET users who were members of the group are no longer members the next time their Ektron CMS400.NET information is updated. The discrepancy is flagged on the Active Directory Setup and Active Directory Status screens.

Deleting a User Group in Ektron CMS400.NET

If you delete a user group in Ektron CMS400.NET and users are assigned to that group within AD, nothing happens. This is because the AD Integration Feature assumes that, in Ektron CMS400.NET, the administrator only sets up user groups that are meaningful to Ektron CMS400.NET, and some AD groups are not meaningful to Ektron CMS400.NET.

Associating User Information in AD with Ektron CMS400.NET

A key component of the Active Directory Integration feature is to maintain consistent information between the AD and Ektron CMS400.NET. This section explains the transfer of user information between AD and Ektron CMS400.NET when integration is first enabled and on an ongoing basis.

This section covers the following topics.

- ”Automatically Copying AD User Information When Integration is First Enabled” on page 819
- ”Automatically Copying AD User Information after Integration is Enabled” on page 820
- ”Manually Adding AD User Information to Ektron CMS400.NET” on page 820
- ”Editing User Information in Ektron CMS400.NET” on page 821
- ”Deleting Users” on page 821
- ”Replacing a User” on page 822

Automatically Copying AD User Information When Integration is First Enabled

Ektron CMS400.NET Database Already Implemented

If **Enable automatic addition of user from AD** is checked on the Active Directory Setup screen, user information is copied from the AD to Ektron CMS400.NET when that user logs in or is added to Ektron CMS400.NET.

See Also: "The Active Directory Setup Screen" on page 826

The first time the user information is copied, the AD information overwrites all Ektron CMS400.NET information. To learn how information is updated from then on, see "Copying User Group Information from AD to Ektron CMS400.NET" on page 812.

If two or more AD users have the same Ektron CMS400.NET user logon name but different domains (for example, JDoe in Eng.Example.com and JDoe in Mkt.Example.com) and that username (JDoe) also exists in Ektron CMS400.NET, the Active Directory Setup and Active Directory Status screens indicate this discrepancy by the following message:

CMS users need to be associated with Active Directory users.

Click the message to proceed to the Associate Ektron CMS400.NET Users to Active Directory Users screen and associate an AD user with the Ektron CMS400.NET user.

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 831

Ektron CMS400.NET is Being Installed, so No User Database Exists

Go to the Search Active Directory for Users Screen and select AD users that will use Ektron CMS400.NET. When you add a user, the user information is copied from the AD to Ektron CMS400.NET.

See Also: "The Search Active Directory for Users Screen" on page 837

NOTE You can only select AD users that do not already exist in Ektron CMS400.NET. Also, the Active Directory Setup screen can restrict AD integration to one domain. If it does, you can only search for users within that domain.

Automatically Copying AD User Information after Integration is Enabled

User information is copied from the AD to Ektron CMS400.NET when either of these events occurs:

- the user logs in
- someone clicks the Refresh button ( ) on the user's View User Information screen

See Also: "The View User Information Screen" on page 835

If a user's last name, first name, email field, or group membership changed in the AD, those changes are copied to Ektron CMS400.NET. However, if a user's *logon name* changed in the AD, that change is not copied to Ektron CMS400.NET because Ektron CMS400.NET uses that field to identify the user. Instead, that discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. You should proceed to the Associate Ektron CMS400.NET Users to Active Directory Users screen, where you can update the AD user associated with the Ektron CMS400.NET user.

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 831

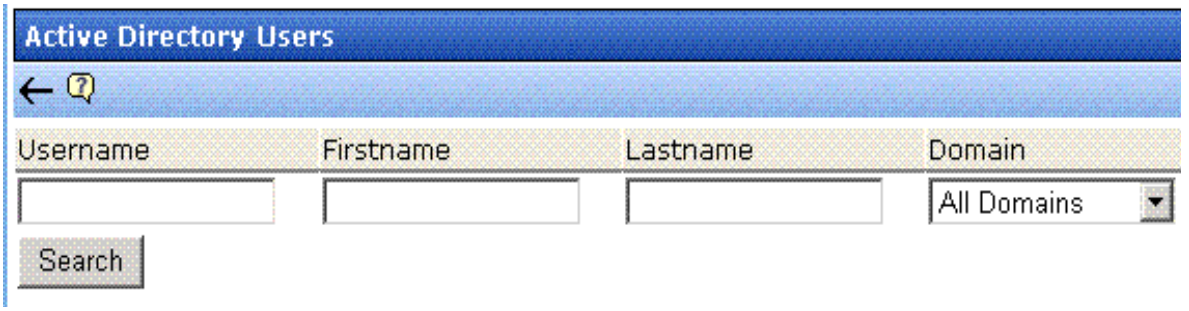
Manually Adding AD User Information to Ektron CMS400.NET

Before using the AD integration feature, add all AD users that will use your Web site to Ektron CMS400.NET. This can be done automatically, as explained "Automatically Copying AD User Information When Integration is First Enabled" on page 819.

If you want to manually add an AD user to **Ektron CMS400.NET**, follow these steps.

1. From the left side of the Workarea, click **Users**.
2. Click the Add Users button ( ).

3. The Search Active Directory for Users screen appears.



4. From the **Domain** pull-down list, select the domain from which you want to add a user.
5. Enter as much information as you know into the other fields.
6. Click the **Search** button.
7. A new screen displays all users that satisfy the search criteria.
8. Click the check box under the **Add** column to add users to Ektron CMS400.NET.
9. Click the Save button ( ).

Editing User Information in Ektron CMS400.NET

Because **Ektron CMS400.NET** does not write to the AD, you can only change the **User Language** and **Disable email Notifications** fields within the Ektron CMS400.NET Edit User screen. You must edit all other user fields from the AD.

Deleting Users

If a user is deleted in AD, Ektron CMS400.NET does not automatically delete the user. However, the user's login fails because he cannot be authenticated.

The user remains in Ektron CMS400.NET, and the discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. You should delete the user from Ektron CMS400.NET using the Delete User function.

See Also: "Deleting a User" on page 730

NOTE If you mistakenly delete all users with administrative privileges, you can still sign in using the builtin user's username and password. For more information, see "BuiltIn User" on page 30.

Replacing a User

If you associate the wrong AD user with a Ektron CMS400.NET user, you can replace the user. If you do, all Ektron CMS400.NET privileges and workflow responsibilities assigned to the old user transfer to the new one.

Follow these steps to associate a Ektron CMS400.NET user with a new AD user.

1. From the left side of the Workarea, click **Users**.
2. Click the user you want to replace.
3. Click the Associate CMS User with Different AD User button ( ).
4. Select a user to replace the user you selected in Step 2.
5. Click the Save button ( ).

When you complete this procedure, the first user is deleted from Ektron CMS400.NET.

The Screens of the Active Directory Feature in Active Directory Integration Mode

The Active Directory feature uses the following screens:

- "The Edit Domains Screen" on page 823
- "The Active Directory Setup Screen" on page 826
- "The Active Directory Status Screen" on page 830
- "The View Users Screen" on page 834
- "The View User Groups Screen" on page 837

This section explains how to use each screen.

The Edit Domains Screen

Use this screen to identify each network domain you will use with **Ektron CMS400.NET**'s Active Directory feature. You would use this when you want to define domains, as opposed to using auto discovery to find them.

This feature is described through the following subtopics.

- "Enabling the Edit Domains Screen" on page 823
- "Accessing the Edit Domains Screen" on page 823
- "Fields of the Edit Domains Screen" on page 824
- "How Domains are Used" on page 825

Enabling the Edit Domains Screen

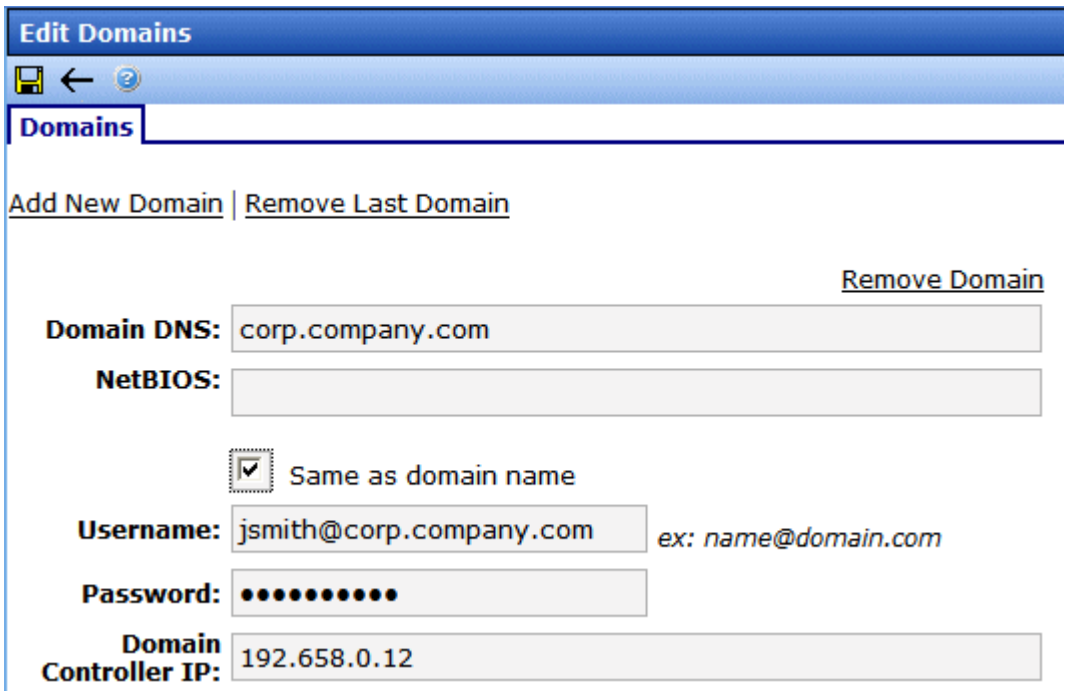
To have the Edit Domains screen appear, set the following web.config file values as shown below.

web.config value	Setting
ek_ADEnabled	True
ek_ADAdvancedConfig	True
ek_ADUsername	blank (username entered in Edit Domains screen)
ek_ADPassword	blank (username entered in Edit Domains screen)
ek_AUTH_Protocol	LDAP

Accessing the Edit Domains Screen

After you modify web.config as described above, access the Edit Domains screen by going to **Workarea > Settings > Configuration > Active Directory > Domains**.

Below is a sample of the screen.



The screen lets you add new domains, modify existing ones, or delete obsolete ones.

Fields of the Edit Domains Screen

When defining a domain, enter the following information.

Field	Description
Domain DNS	Enter the domain's DNS. Contact your server administrator for this information. For example, **corp.example.com**.
NetBIOS	If your NetBios is the same as your domain name, leave the checkbox box checked. Otherwise, uncheck the box and enter your NetBIOS setting. Contact your server administrator for this information.
Username	Enter the name of the user with permission to sign on to the domain server. The name is in the format *username@domainDNS.* For example, **jsmith@corp.example.com**.

Field	Description
Password	Enter the password of the user identified above.
Domain Controller IP	Enter the IP address or DNS name of your domain controller. Note: If using Active Directory across a firewall, the IP address should be that of the firewall. On the firewall, traffic on port 389 (LDAP) should be allowed.

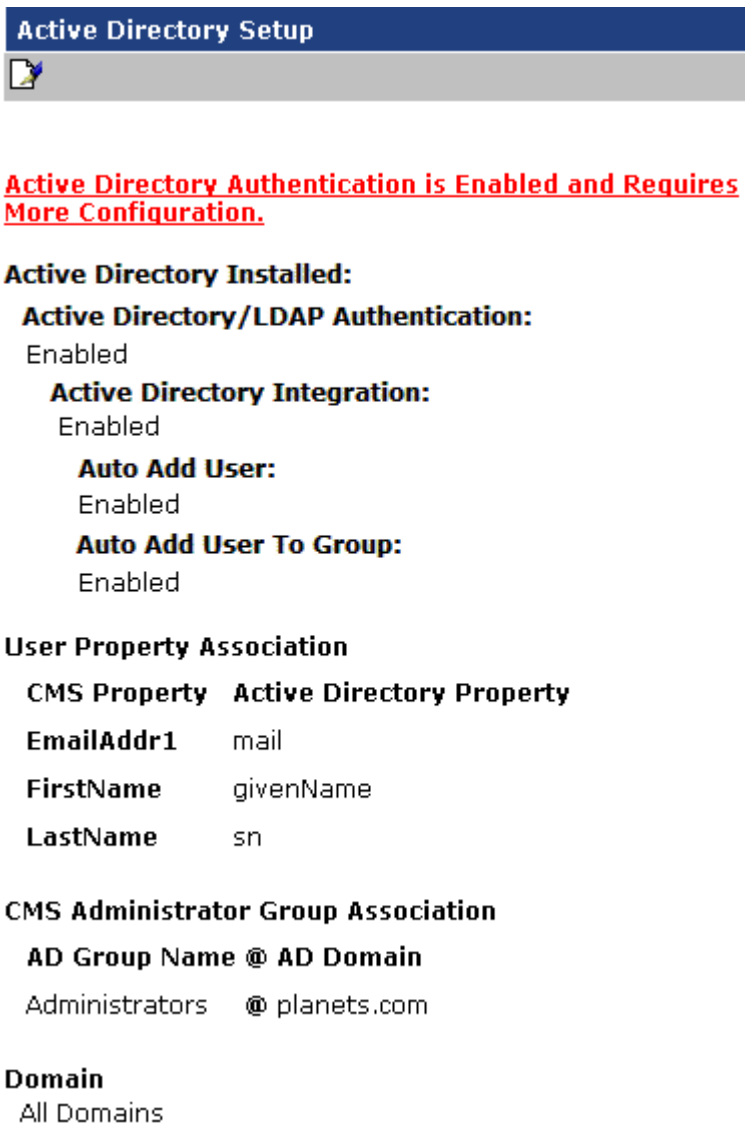
How Domains are Used

Domains defined on this screen are referenced when defining the user group that maps to the hard coded Ektron CMS400.NET administrator group. *See Also:* "The Screens of the Active Directory Feature in Active Directory Integration Mode" on page 822

While defining the user group, first select a domain. **Ektron CMS400.NET** creates a selection list of Active Directory user groups in that domain. In this way, you must choose a user group within the selected domain.

The Active Directory Setup Screen

The Active Directory Setup screen (illustrated below) lets you enable and disable the Active Directory feature, as well as determine other aspects of AD management, such as whether users and groups are automatically updated. To access the screen, click **Settings > Configuration > Active Directory > Setup** from the left panel of the Workarea.



The following table describes the fields on the screen.

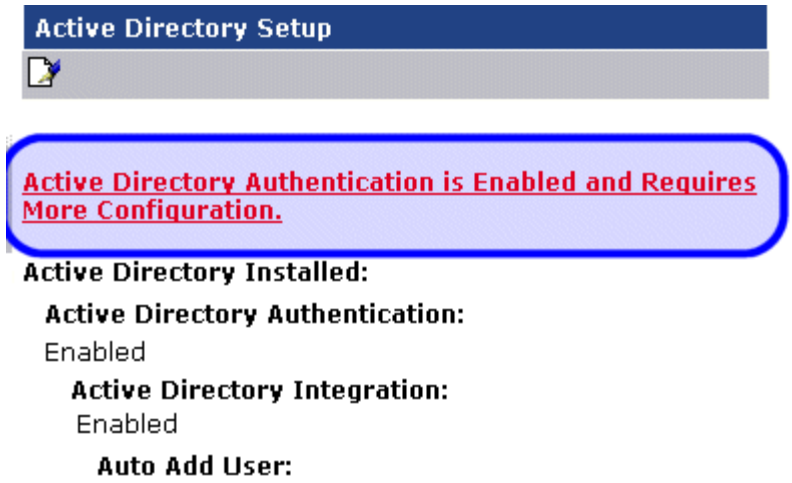
See Also: "Messages Near the Top of the Active Directory Setup Screen" on page 829

Field	Description	For more information, see
Active Directory Installed		
Disable Active Directory and LDAP Authentication	Disables the use of Active Directory and LDAP Authentication.	"Disabling AD Integration" on page 840
Enable LDAP Authentication	If enabled, you need to fill out the following five fields. These fields are explained in the LDAP Authentication chapter.	"Enabling LDAP" on page 860
LDAP Server	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 860
Port	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 860
Organization	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 860
Domain	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 860
Organizational Unit	Explained in LDAP Authentication chapter.	"Enabling LDAP" on page 860
Active Directory Authentication	If enabled, user authentication is functional, and you can enable the following three fields.	"User Authentication Only Mode" on page 841 For information on LDAP, see "LDAP Authentication" on page 858
Active Directory Integration	If enabled, the Active Directory feature is functional. Note: Can only be enabled if Active Directory Authentication is enabled.	"Active Directory Integration" on page 808

Field	Description	For more information, see
Auto Add User	If enabled, user information is copied from the AD to Ektron CMS400.NET when that user logs in or when the user is added to Ektron CMS400.NET. Note: Can only be enabled if Active Directory Integration is enabled.	"Associating User Information in AD with Ektron CMS400.NET" on page 818
Auto Add User To Group	If enabled, a user's group membership is first copied from the AD when a user logs in or is added. Note: Can only be enabled if Active Directory Integration is enabled.	"The Screens of the Active Directory Feature in Active Directory Integration Mode" on page 822
User Property Mapping		
FirstName	Enter the Active Directory Property that maps to the user's first name in Ektron CMS400.NET. By default, this is set to `givenName`, but you can change it to any AD property.	MSDN Library (http://msdn.microsoft.com/library/default.asp)> Active Directory, ADSI and Directory Services > Directory Services > Active Directory > Active Directory Reference > Active Directory User Interface Mappings.
LastName	Enter the Active Directory Property that maps to the user's last name in Ektron CMS400.NET. By default, this is set to `sn`, but you can change it to any AD property.	same reference as FirstName (above)
EmailAddr1	Enter the Active Directory Property that maps to the user's last name in Ektron CMS400.NET. By default, this is set to `mail`, but you can change it to any AD property.	same reference as FirstName (above)
Ektron CMS400.NET Administrator Group Mapping		
AD Group Name @ AD Domain	Enter the Active Directory user group and domain name that maps to the hard coded Ektron CMS400.NET administrator group. If you do not have an AD user group that includes all Ektron CMS400.NET administrators, you should create one and enter its name and domain here.	"Mapping the Administrator Group" on page 815

Field	Description	For more information, see
Domain	If you want to restrict the search of new users and groups to one AD domain, select that domain. If you do, the Search Active Directory for Users and Search Active Directory for Groups screens let you search in the selected domain only. Also, if any Ektron CMS400.NET user or group names include a domain (for example, admin@saturn.example.com) that is excluded by your selection, those users/groups are flagged on the Active Directory Setup and Active Directory Status screens because the names now include an invalid domain.	

Messages Near the Top of the Active Directory Setup Screen



Message	Explanation
Active Directory Authentication is Enabled and Requires More Configuration.	Some Ektron CMS400.NET users are not associated with AD users. Also, if you are using full active directory integration mode, user groups and/or user group relationships may not be associated.

Message	Explanation
Active Directory Authentication is disabled, but needs further configuration	Some Ektron CMS400.NET users and/or groups are no longer unique. This happens because, in the AD, users and groups can share a logon name as long as their domains are different. But, when AD authentication is disabled, two Ektron CMS400.NET users or groups can no longer share a name -- each must be unique.

If you see either message, click it. You proceed to the Active Directory Status screen, which helps you resolve the discrepancies.

See Also: "The Active Directory Status Screen" on page 830

The Active Directory Status Screen

Use the Active Directory Status screen to resolve the following discrepancies between Ektron CMS400.NET and AD.

- an Ektron CMS400.NET user needs to be associated with an AD user
- an Ektron CMS400.NET user group needs to be associated with an AD user group
- an Ektron CMS400.NET user's group membership need to be associated with the same AD user's group membership

To access the screen, click **Configuration > Active Directory > Status** from the left panel of the Workarea.

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Active Directory Status
Active Directory is Enabled and Requires More Configuration:
CMS users need to be associated with Active Directory users.
CMS groups need to be associated with Active Directory groups.
CMS relationships need to be associated with Active Directory relationships.

There are several reasons why such discrepancies may occur. To learn more about why

- an Ektron CMS400.NET user is not associated with an AD user, read "Associating User Information in AD with Ektron CMS400.NET" on page 818.
- an Ektron CMS400.NET user's group membership is not associated with the user's AD group membership, read "Associating a User's AD Group Information with Ektron CMS400.NET" on page 813
- an Ektron CMS400.NET group is not associated with an AD group, read "The Screens of the Active Directory Feature in Active Directory Integration Mode" on page 822

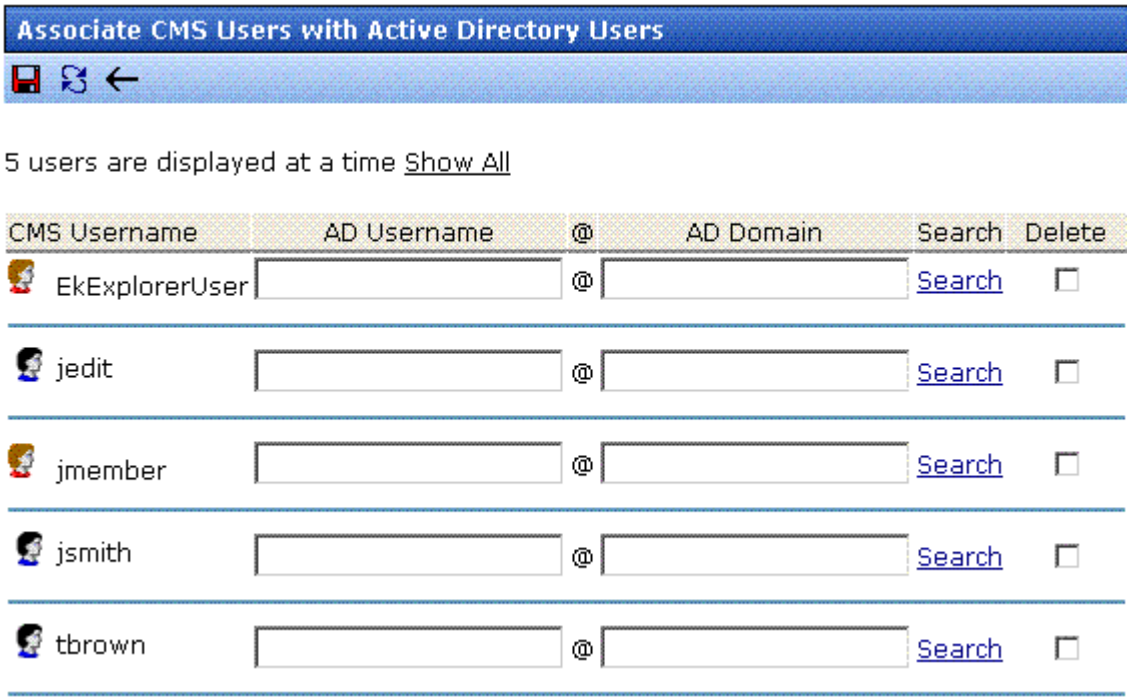
If you click any link on the Active Directory Status screen, a new screen appears that allows you to resolve the discrepancy. For information on how to use these screens, see the following topics.

- "Associating Ektron CMS400.NET Users with Active Directory Users" on page 831
- "Associating User Group Membership with Active Directory User Group Membership" on page 833
- "Associating Groups with Active Directory Groups" on page 833

Associating Ektron CMS400.NET Users with Active Directory Users

If you click **CMS users need to be associated with Active Directory users** on the Active Directory Status screen, the Associate Ektron CMS400.NET Users with Active Directory Users

screen appears (illustrated below). Use this screen to associate Ektron CMS400.NET users with AD users.



If a user with the same username exists in the AD, that name and domain appear by default in the **AD Username** and **AD Domain** fields. If the user exists in the more than one AD domain (as illustrated in the first example above), select a domain from the pull-down list.

If there is no default and you know the AD user name to associate with an Ektron CMS400.NET user, enter that in the **AD Username** and **AD Domain** fields. If you do not know the AD username, click **Search** to find the user in the AD.

If you decide to change the username in AD to match the Ektron CMS400.NET username, make the change in the AD. Then, click the Refresh button ( ) to update Ektron CMS400.NET and resolve the discrepancy.

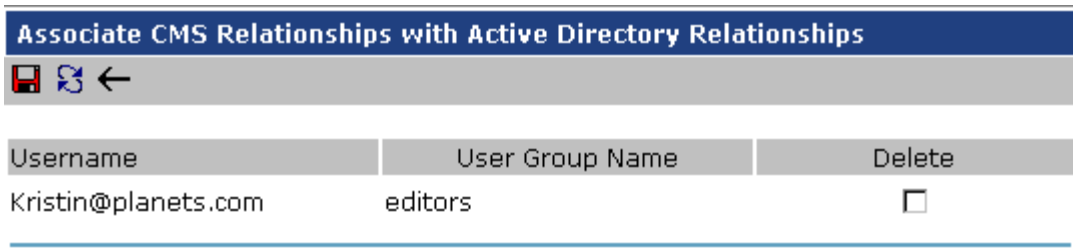
Finally, if a user should not exist in Ektron CMS400.NET, click the box under the **Delete** column to delete the user from Ektron CMS400.NET.

After you make all necessary changes, click the Save button ( ).

Associating User Group Membership with Active Directory User Group Membership

If you click **CMS relationships need to be associated with Active Directory relationships** on the Active Directory Status screen, the Associate Ektron CMS400.NET Relationships with Active Directory Relationships screen appears (illustrated below). Use this screen to coordinate Ektron CMS400.NET user group membership with AD user group membership.

The screen displays a user's group membership that exists in Ektron CMS400.NET, but does not exist in the AD.



See Also: "Associating a User's AD Group Information with Ektron CMS400.NET" on page 813

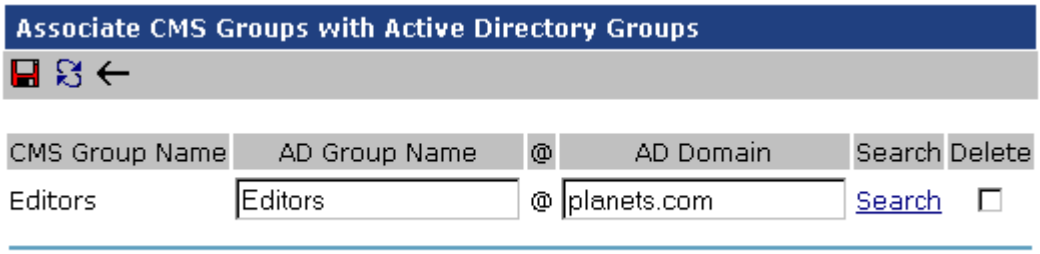
After viewing the discrepancy on the screen, you have two choices:

- To associate the user with the same user group in AD, go to the AD and assign the user to the group. Then, return to this screen and click the Refresh button ( ) to update the user group information in Ektron CMS400.NET.
- To remove the user's group membership in Ektron CMS400.NET, check the box under the **Delete** column and click the Save button ( ).

Associating Groups with Active Directory Groups

If you click **CMS groups need to be associated with Active Directory groups** on the Active Directory Status screen, the Associate Ektron CMS400.NET User Groups with Active Directory

Groups screen appears (illustrated below). Use this screen to associate Ektron CMS400.NET groups with AD groups.



If a group with the same groupname exists in the AD, that name appears by default in the **AD Group Name** field. If the group exists in the more than one domain within the AD, select a domain from the pull-down list.

If there is no default and you know the AD group name to associate with an Ektron CMS400.NET group, enter that in the **AD Group Name** and **AD Domain** fields. If you do not know the AD groupname, click **Search** to find the group in the AD.

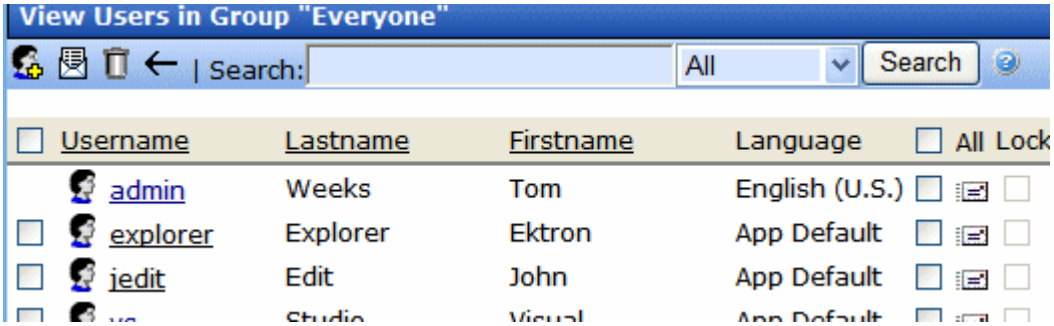
Finally, if this group should not exist in the Ektron CMS400.NET database, click the box under the **Delete** column to delete the group from Ektron CMS400.NET.

After you make all necessary changes, click the Save button ( ) to save them.

The View Users Screen

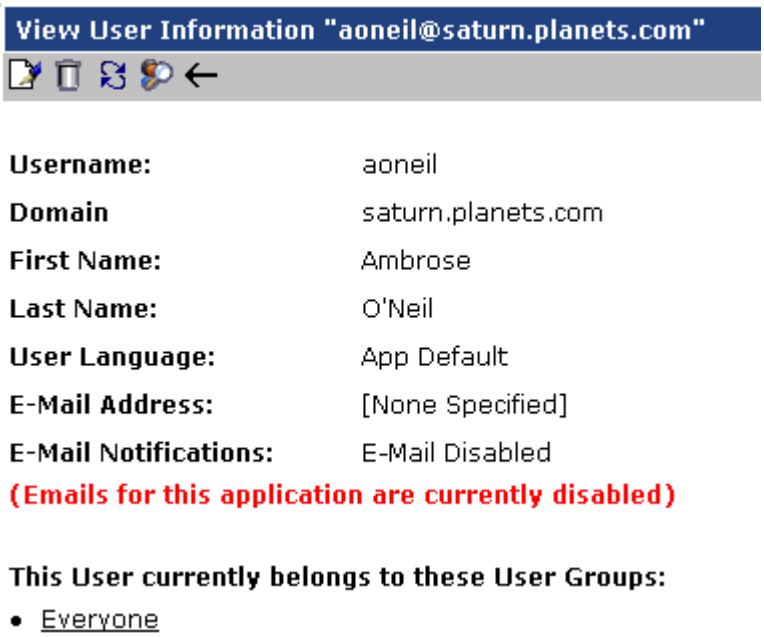
The View Users screen (illustrated below) lists all users in the Ektron CMS400.NET database. To access the screen, click **Users**

from the left panel of the Workarea. To view more information for a user, click that user to move to the View User Information screen.



The View Users screen also provides a toolbar button ( ) that lets you add AD users to the Ektron CMS400.NET database. When you click it, the Search Active Directory for Users Screen appears.

The View User Information Screen



The View User Information Screen displays the user's

- username and domain
- first and last name

- language
- email address and whether the user receives email notifications
- user groups

If you are using *user authentication mode*, **username** and **domain** can only be edited in the AD. You can edit all other fields on this screen.

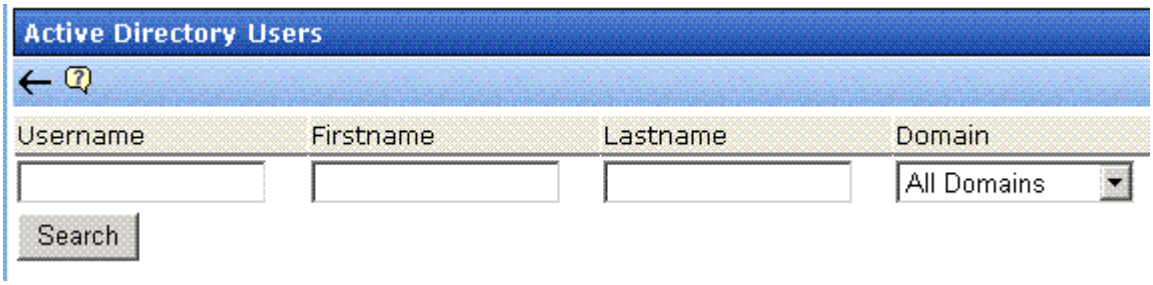
If you are using *full AD Integration mode*, you can only edit **language** and whether the user receives email notifications. You must edit the other fields in the AD.

The screen also displays the following buttons.

Button	Description
	Edit information on screen
	Delete user *See Also:* "Deleting Users" on page 821
	Retrieve latest information from AD into Ektron CMS400.NET *See Also:* "Copying User Group Information from AD to Ektron CMS400.NET" on page 812 Note: This toolbar button does not appear if you are using user authentication mode.
	Replace user *See Also:* "Replacing a User" on page 822
	Return to previous screen

The Search Active Directory for Users Screen

Use this screen to add AD users to Ektron CMS400.NET. To access the screen, click **Users** from the left panel of the Workarea, then click the Add button ( ).



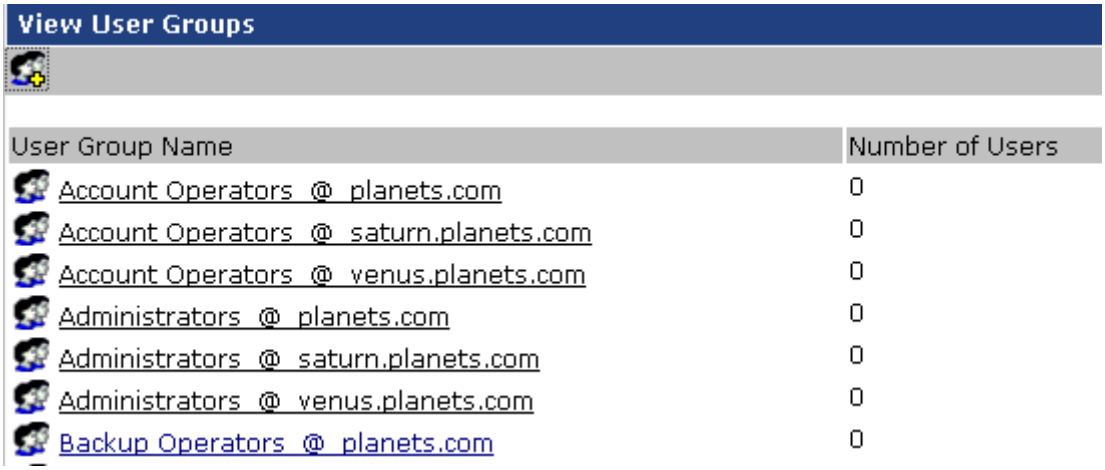
Enter as much search criteria as you know to reduce the number of users that the search yields. For example, if you know that the user's last name is Jackson and the user is in the planets domain, enter those criteria and you will get fewer hits.

When the Active Directory Users screen appears, click the box next to users that you want to create in Ektron CMS400.NET. Then, click the Save button ( ) to copy their information into Ektron CMS400.NET.

The View User Groups Screen

The View User Groups Screen displays all AD user groups that have been copied into Ektron CMS400.NET. (See "Copying User Groups from AD to Ektron CMS400.NET" on page 812).

To access the screen, click **User Groups** from the left panel of the Workarea.


View User Groups
User Group Name
Number of Users
Account Operators @ planets.com 0
Account Operators @ saturn.planets.com 0
Account Operators @ venus.planets.com 0
Administrators @ planets.com 0
Administrators @ saturn.planets.com 0
Administrators @ venus.planets.com 0
Backup Operators @ planets.com 0

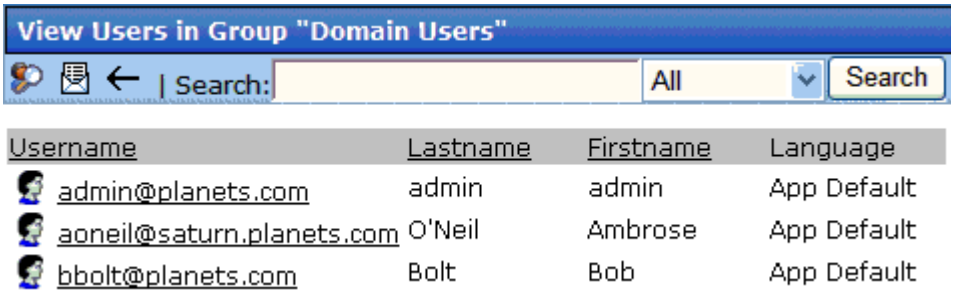
To view more information for a group, click that group to move to the View Users in Group screen.

The View User Groups screen also provides a toolbar button ( ) that lets you add AD groups to the Ektron CMS400.NET database. When you click it, the Search Active Directory for Groups screen appears.

View Users in Group Screen

The View Users in Group Screen displays, for each user in the group

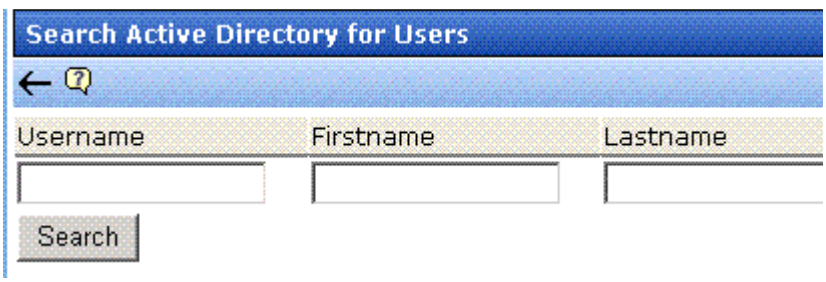
- username and domain
- first and last name
- language



The screen also displays the following buttons.

Button	Description
	Replace group *See Also:* "Replacing a User Group" on page 817
	Return to previous screen

The Search Active Directory for Groups Screen



Use this screen to add AD groups to Ektron CMS400.NET. Enter as much search criteria as you know to reduce the number of groups that the search yields.

NOTE You can only select AD groups that do not already exist in Ektron CMS400.NET. Also, the Active Directory Setup screen can restrict AD integration to one domain. If it does, you can only search for groups within that domain.

For example, if you know that a group begins with S and is in the planets domain, enter those criteria and you will get fewer hits.

After you click Search, a new screen appears listing all AD groups that satisfy the search criteria. Click the box next to groups that you want to create in Ektron CMS400.NET. Then, click the Save button ( ) to copy their information.

Disabling AD Integration

If you decide to disable AD authentication or integration, edit the Active Directory Setup screen and uncheck the box next to **Enable Active Directory Authentication** or **Enable Active Directory Integration**.

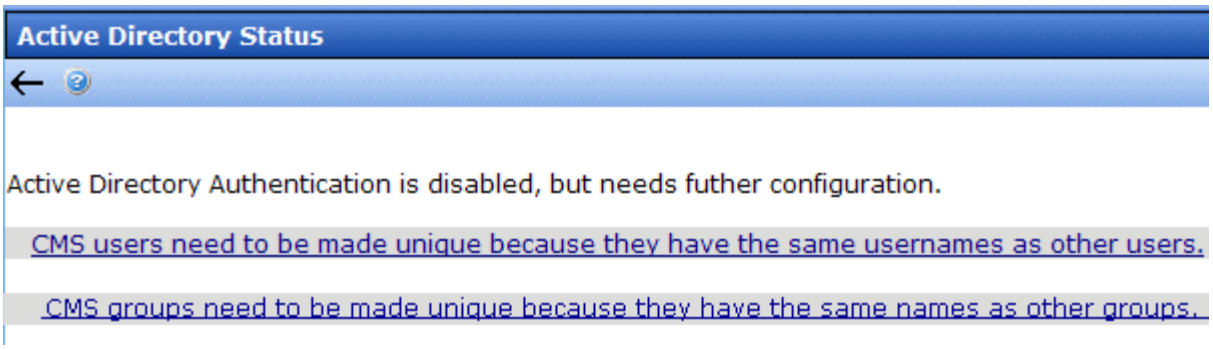
See Also: "The Active Directory Setup Screen" on page 826

If you do this, and any users or groups share the same name within different domains, the following message appears on the screen.

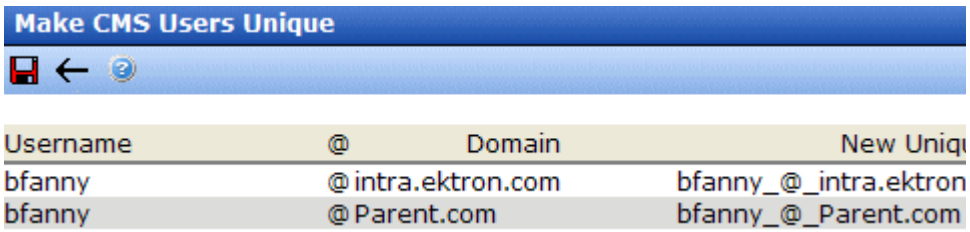
Active Directory Authentication is disabled, but needs further configuration

For example, two users are named JJackson@example.net and JJackson@example.com. When AD was enabled, the domain names made the two users unique. However, when you disable integration, the domain names are dropped, so the user names are now identical. You need to make the users unique.

If you click the message (above) on the Active Directory Setup screen, you move to the Active Directory Status screen. The following messages may appear.

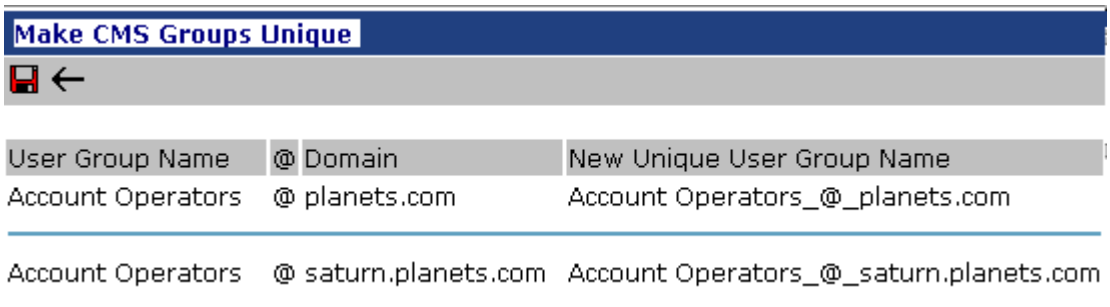

Active Directory Status
Active Directory Authentication is disabled, but needs futher configuration.
CMS users need to be made unique because they have the same usernames as other users.
CMS groups need to be made unique because they have the same names as other groups.

Click the message to proceed to the Make Ektron CMS400.NET Users Unique screen (illustrated below).



This screen lists all users whose user names are not unique and suggests a new, unique Ektron CMS400.NET username. The new name consists of the user name, underscore, at sign (@), underscore, the domain name. So, for example, JJackson@example.net would appear as JJackson_@_example.net.

The same is true for user groups. For example, if you had two groups name Account Operators, one in the example.com domain and another in the saturn.example.com domain, the Make Ektron CMS400.NET Groups Unique screen would look like this.



Ektron recommends that you accept the suggested new names. Click the Save ( ) button to do so.

One advantage of using the new name format is that, if you later decide to re-enable AD integration, the software can automatically associate the AD and Ektron CMS400.NET users or groups.

User Authentication Only Mode

In user authentication mode, the sharing between AD and **Ektron CMS400.NET** is limited to user logon name, domain, and password.

The following topics explain how to work with user authentication mode.

- ”How Information is Transferred from Active Directory to Ektron CMS400.NET” on page 842
- ”Which Information is Transferred from Active Directory to CMS400.NET” on page 842
- ”User Groups” on page 843
- ”Adding User Information from AD to Ektron CMS400.NET” on page 843
- ”Editing User Information in Ektron CMS400.NET” on page 843
- ”Deleting Users” on page 844
- ”Replacing a User” on page 844
- ”The Screens of the Active Directory Feature in User Authentication Mode” on page 844
- ”Disabling AD Authentication” on page 844

How Information is Transferred from Active Directory to Ektron CMS400.NET

Ektron CMS400.NET does not write to the AD – it only reads from it. This results in the following changes to how the username, domain, and password are handled within Ektron CMS400.NET.

- Changes to user logon name, domain and password must be made in the AD — you cannot update these fields in the Ektron CMS400.NET Edit User screens.
- When adding a new user to Ektron CMS400.NET, you can only select AD users. If the user does not exist in the AD, create the user there, and then import the user into Ektron CMS400.NET.

Which Information is Transferred from Active Directory to CMS400.NET

CMS refers to the following AD sign-in authentication information during sign-in: password, user logon name, and domain. Note that the password is not stored in CMS — CMS only refers to the password during sign-in.

User Groups

User authentication mode has no effect on user groups. To learn more about user groups, see "Managing User Groups" on page 731.

Adding User Information from AD to Ektron CMS400.NET

See "Manually Adding AD User Information to Ektron CMS400.NET" on page 820

Changing the User Login Name in AD

If a user's *logon name* changes in the AD, it no longer matches the Ektron CMS400.NET logon name. This discrepancy is flagged on the Active Directory Setup and Active Directory Status screens. You should proceed to the Associate Ektron CMS400.NET Users to Active Directory Users screen, where you can update the user information.

Alternatively, you could

1. Go to the View User Information screen.
2. Select the user whose AD name changed.
3. Click the Associate the Ektron CMS400.NET user with Different AD user toolbar button ( ).
4. Select the AD user and domain.

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 831

Editing User Information in Ektron CMS400.NET

Ektron CMS400.NET does not write to the AD. This means that you can only change the **Username** and **Domain** fields from the AD.

You can change the **First Name**, **Last Name**, **email Address**, **User Language** and **Disable email Notifications** fields on the Ektron CMS400.NET Edit User screen.

Deleting Users

See "Deleting Users" on page 821

Replacing a User

See "Replacing a User" on page 822

IMPORTANT! If you replace a user in user authentication-only mode, the user's first name, last name, and email address are not overwritten with information in the active directory.

The Screens of the Active Directory Feature in User Authentication Mode

Since the scope of user authentication mode is limited, only some fields on the AD screens are used. For example, on the Active Directory setup screen, the only relevant fields are authentication and domain.

See Also: "The Active Directory Setup Screen" on page 826

Also, on the Active Directory Status Screen, only one discrepancy message may appear:

CMS user needs to be associated with an AD user

See Also: "Associating Ektron CMS400.NET Users with Active Directory Users" on page 831

The View Users Screen works the same for both modes.

See Also: "The View User Information Screen" on page 835

Disabling AD Authentication

See "Disabling AD Integration" on page 840

Logging into a System that Uses AD Integration

Because usernames and passwords are stored in the AD by domain, the AD sign on procedure requires you to select a domain name. So, if AD integration is enabled, the sign on screen includes a drop-down list that prompts the user to select a domain.

NOTE Your organization determines AD domain names.

For more information about logging in, see "Logging Into an Ektron CMS400.NET Web Site" on page 10.

This feature is explained through the following topics.

- "Single Sign On" on page 845
- "Setting up Single Sign On" on page 846

Single Sign On

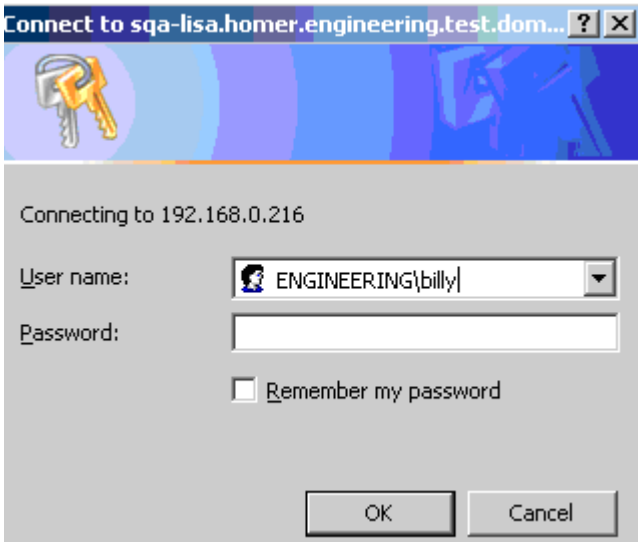
You can implement a Single Sign On feature that lets a user bypass the Login screen. The feature retrieves the user's Windows login information from the server to authenticate access to **Ektron CMS400.NET**.

How Single Sign on Works

The feature uses a variable called `User.Identity.Name`. This holds the user's account\domain in Active Directory, and has the format `[domain]\[username]`. For example, `EKTRON1\skearney`. This variable is set when a user authenticates against a Windows server.

When a user clicks the login server control, if the variable is passed and Active Directory is enabled, the server control opens the autologin.aspx page. Next, the opening window refreshes just like a normal login, except the user is not prompted to enter a username, password, and domain.

However, if the user's computer is not on a domain, not on the same domain as **Ektron CMS400.NET**, or does not include the **Ektron CMS400.NET** server as a trusted site, the following login screen appears.



If Active Directory is not enabled, the normal login.aspx page appears.

Setting up Single Sign On

The Single Sign On login process uses the autologin.aspx file (in the `workarea/SSO` directory) . Once set up, user authentication is enabled from any domain that this server can reach. For example, if **Ektron CMS400.NET** is located in a third level domain, users from third, second, and first level domains can authenticate.

- ”Setting up Single Sign On Using IIS6” on page 847
- ”Setting up Single Sign On Using IIS7” on page 851

After completing these procedures, enable Active Directory within **Ektron CMS400.NET** (if it isn’t already enabled). *See Also:* ”Setup Guidelines” on page 805

Ektron recommends turning on the auto add options (user and group).

Setting up Single Sign On Using IIS6

Setting up Single Sign On with IIS 6 involves these procedures.

- ”Modifying Web.config for Single Sign On” on page 847
- ”Adjusting Security Settings for the Site Root Folder” on page 847
- ”Adjusting Security Settings for autologin.aspx” on page 849
- ”Adjusting the Login Server Control” on page 851

Modifying Web.config for Single Sign On

1. Open your site root folder.
2. Open the web.config file.
3. Find the `ek_AUTH_protocol` element.
4. Change its value to **GC**. It should look like this:

```
<add key="ek_AUTH_Protocol" value="GC" />
```

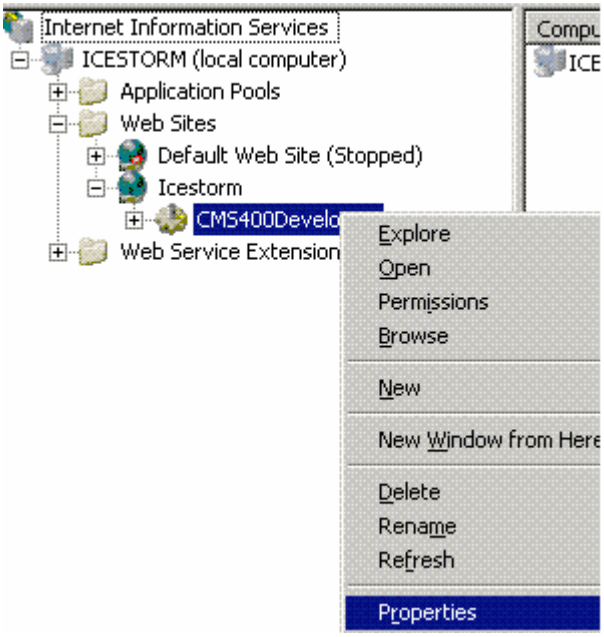
5. Find the `authentication` element.
6. Change the value of the `impersonate` attribute to **true**. It should look like this:

```
<authentication mode="Windows" />

    <identity impersonate="true" userName="" password=""/>
```

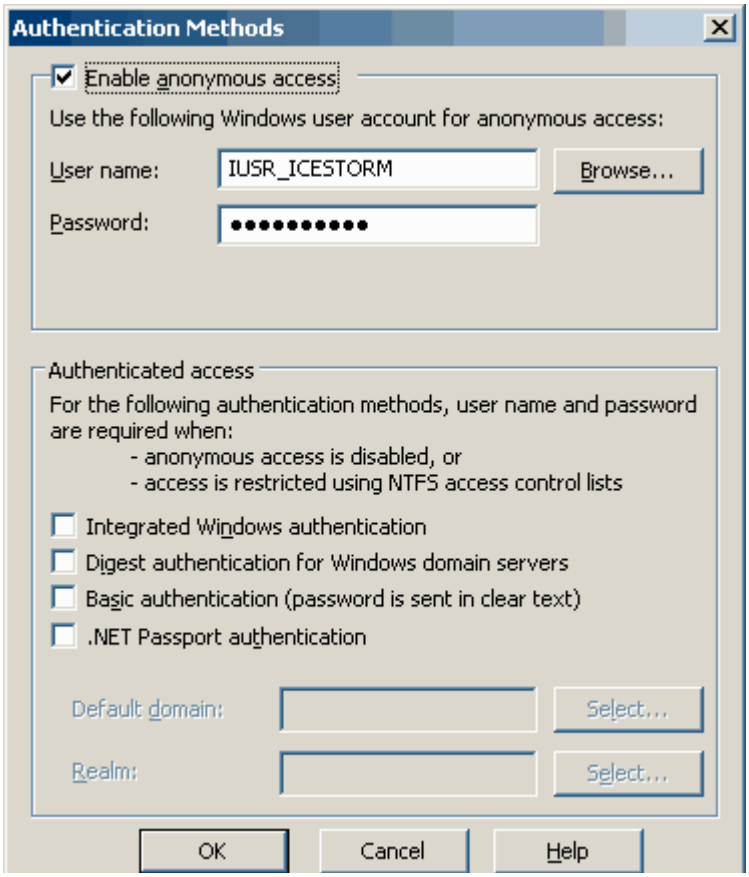
Adjusting Security Settings for the Site Root Folder

1. Go to **Windows Control Panel > Administrative Tools > Internet Information Services**.

2. Within IIS, go to **Web Sites** and select your **Ektron CMS400.NET** site.
3. Right click your **Ektron CMS400.NET** site folder and select **Properties**.

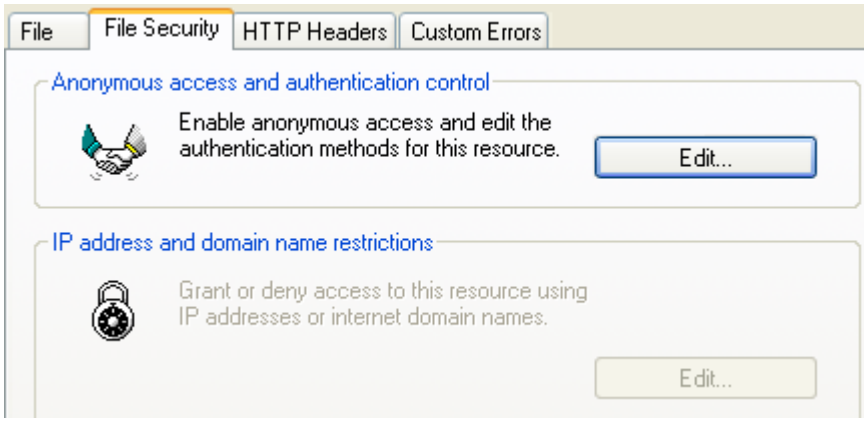


4. Click the **File/Directory Security** tab then the top **Edit** button.
5. Uncheck everything except **Anonymous Access**. The **Account used for anonymous access** should specify a domain account, preferably the root of the Active Directory tree.

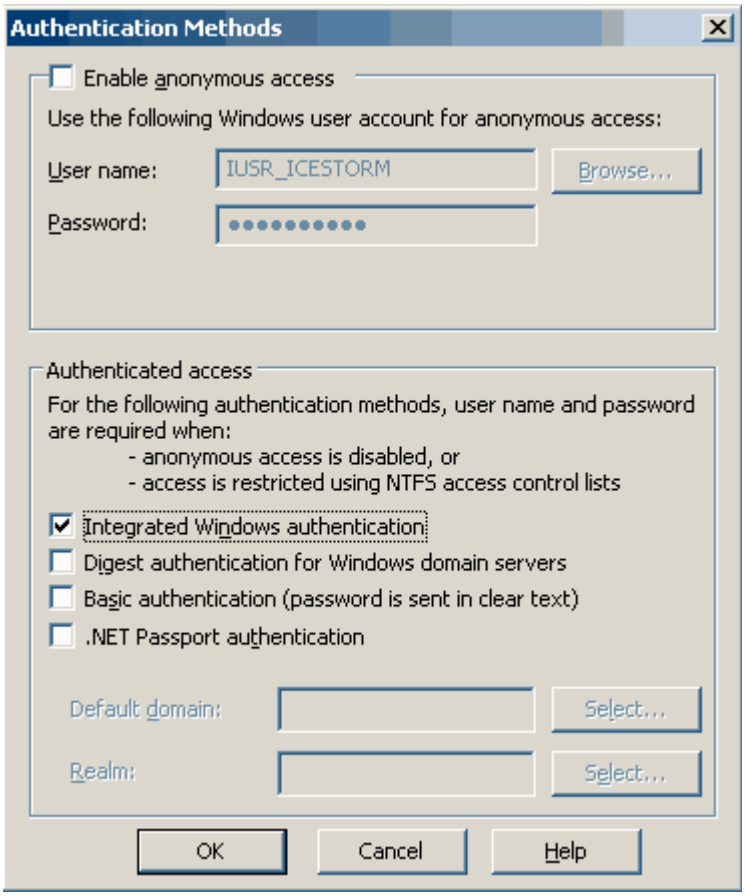


Adjusting Security Settings for autologin.aspx

1. Go to **Windows Control Panel > Administrative Tools > Internet Information Services**.
2. Within IIS, go to **Web Sites > *your Web site's root folder* > Workarea > SSO > autologin.aspx**.
3. Right click autologin.aspx and select **Properties**.
4. Click the **File security** tab and the top **Edit** button.


File
File Security
HTTP Headers
Custom Errors
Anonymous access and authentication control
Enable anonymous access and edit the authentication methods for this resource.
Edit...
IP address and domain name restrictions
Grant or deny access to this resource using IP addresses or internet domain names.
Edit...

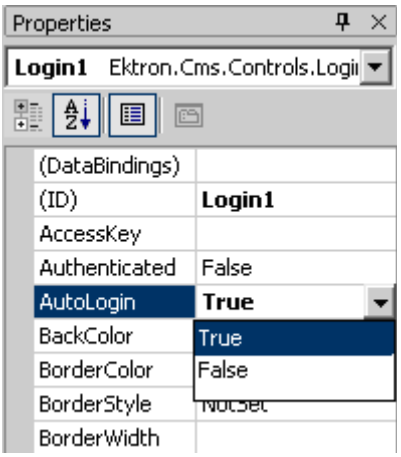
5. Under **Authenticated Access**, uncheck all except **Integrated Windows Authentication**.



As a result, autologin.aspx will pass credentials from the logged-in user's desktop.

Adjusting the Login Server Control

In Visual Studio.NET, open the Login server control and set the AutoLogin property to **True**. (Server Controls are explained in the **Ektron CMS400.NET** Developer's Manual.)



Setting up Single Sign On Using IIS7

- "Modifying Web.config for Single Sign On" on page 847
- "Adjusting Security Settings for the Site Root Folder" on page 847
- "Adjusting Security Settings for autologin.aspx" on page 849
- "Adjusting the Login Server Control" on page 851

After completing these procedures, enable Active Directory within **Ektron CMS400.NET** (if it isn't already enabled). *See Also:* "Setup Guidelines" on page 805

Ektron recommends turning on the auto add options (user and group).

Modifying Web.config for Single Sign On

1. Open your site root folder.
2. Open the web.config file.
3. Find the `ek_AUTH_protocol` element.
4. Change its value to **GC**. It should look like this:

```
<add key="ek_AUTH_Protocol" value="GC" />
```

5. Find the `authentication` element.
6. Change the value of the `impersonate` attribute to **true**. It should look like this:

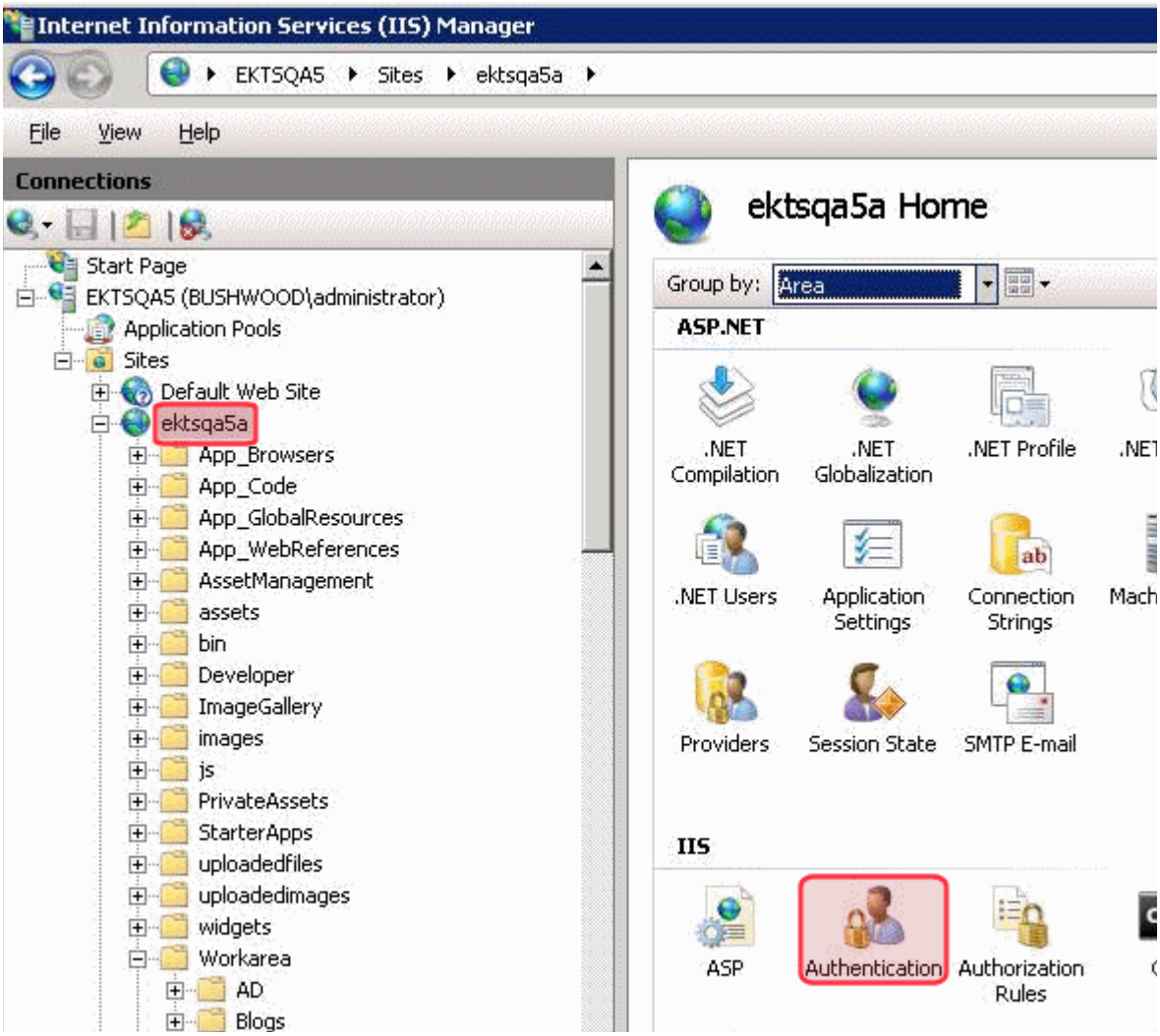
```
<authentication mode="Windows" />

    <identity impersonate="true" userName="" password=""/>
```

7. Comment out the following lines.

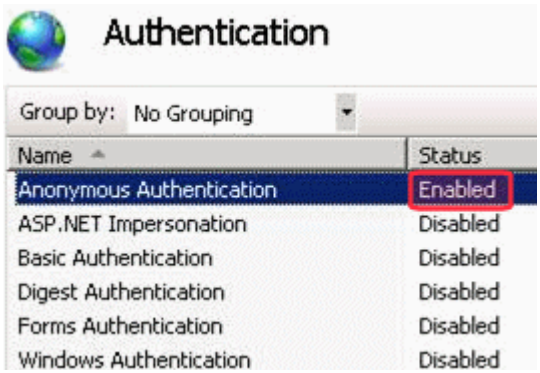
```
<!-- <httpModules>
      <add name="DigestAuthenticationModule"
type="Ektron.ASM.EkHttpDavHandler.Security.DigestAuthenticationModule,Ektron.ASM.EkHttpDavHan
dler " />
      <add name="ScriptModule" type="System.Web.Handlers.ScriptModule, System.Web.Extensions,
Version=1.0.61025.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35" />
    </httpModules>
-->
```

Adjusting Security Settings for the Site Root Folder

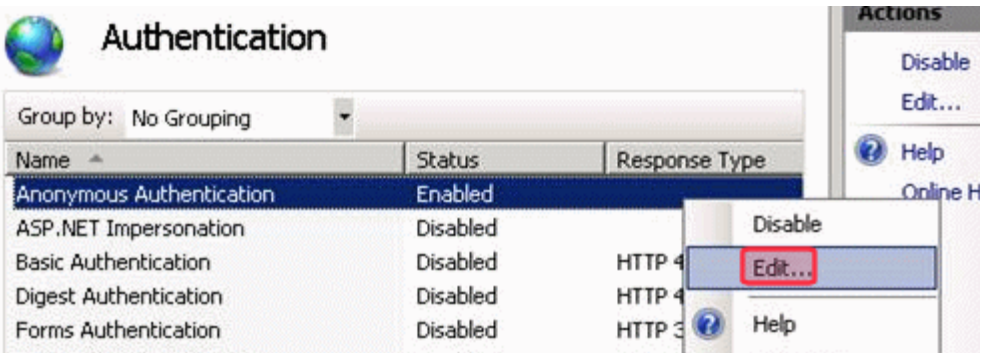
1. Go to **Windows Control Panel > Administrative Tools > Internet Information Services**.
2. Within IIS, go to **Sites** and select your **Ektron CMS400.NET** site.
3. From the right panel, select **Authentication**.



4. On the Authentication screen, enable **Anonymous Authentication**.



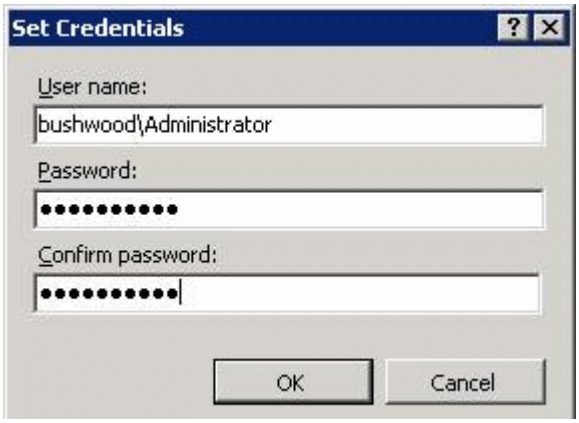
5. Select **Anonymous Authentication** and click **Edit**.



6. Set the credentials to a specific user with a domain account, preferably the root of the Active Directory tree.

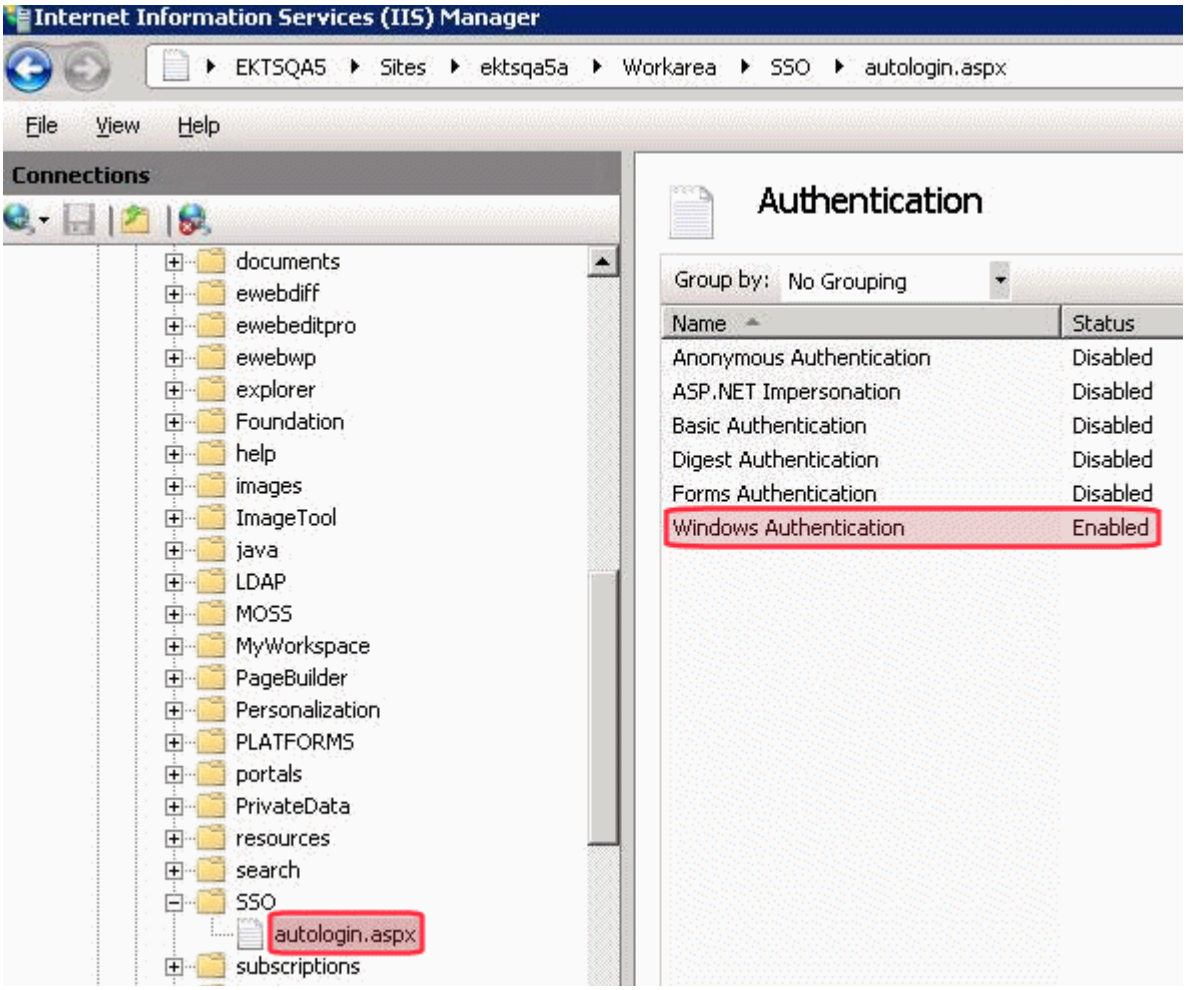
   Click **Set** to select the user.

7. Enter the username and password. Confirm the password.



Adjusting Security Settings for autologin.aspx

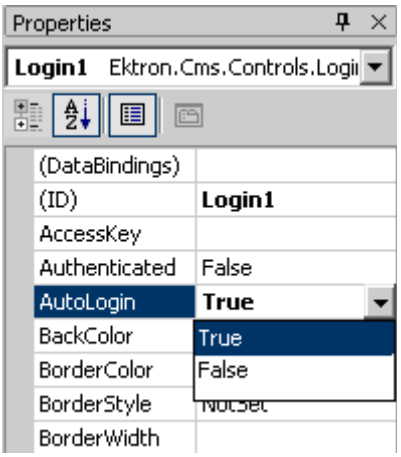
1. Go to **Windows > Control Panel > Administrative Tools > Internet Information Services**.
2. Within IIS, go to **Web Sites > *your Web site's root folder* > Workarea > SSO > autologin.aspx**.
3. From the right panel, enable **Windows Authentication**.



As a result, autologin.aspx will pass credentials from the logged-in user's desktop.

Adjusting the Login Server Control

In Visual Studio.NET, open the Login server control and set the AutoLogin property to **True**. (Server Controls are explained in the **Ektron CMS400.NET** Developer's Manual.)


Properties
Login1 Ektron.Cms.Controls.Logi
(DataBindings)
(ID) Login1
AccessKey
Authenticated False
AutoLogin True
BackColor
BorderColor
BorderStyle
BorderWidth
True
False

LDAP Authentication

LDAP is short for Lightweight Directory Access Protocol. It is a set of protocols that enable corporate directory entries to be arranged in a hierarchical structure which reflects geographic and organizational boundaries.

Ektron CMS400.NET's LDAP feature lets you retrieve user Login information from an LDAP server to Ektron CMS400.NET. As a result, you can administer user information from one place, and users only need to remember one password/username combination to sign on to the network and Ektron CMS400.NET.

The hierarchical structure of LDAP authentication can look a few different ways. For example, if you had the following LDAP structure, the domain would typically span multiple countries.

NOTE Here is a list of the abbreviations: CN = Common Name, OU = Organizational Unit, O = Organization, DN = Distinguished Name.

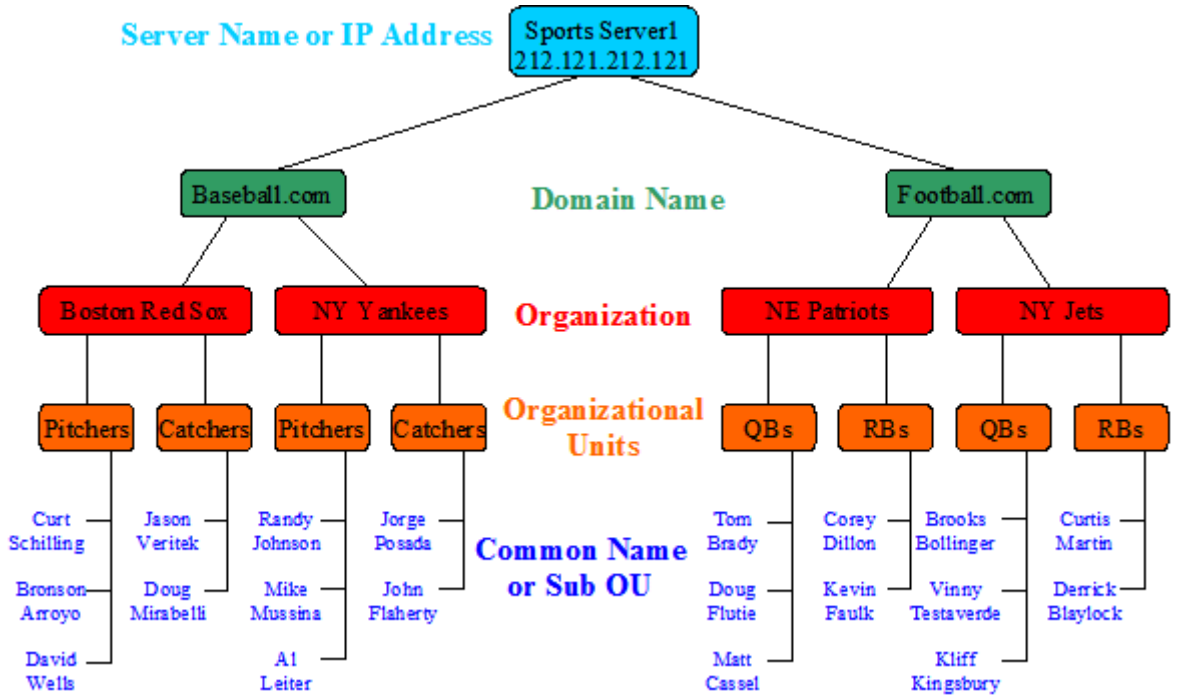
CN=Pitchers Name, OU=Pitchers, O=Baseball Team, C=US, DN=example.com

By changing the order of C and DN, the hierarchy indicates that the domain example.com is located in the US.

CN=Pitchers Name, OU=Pitchers, O=Baseball Team, DN=example.com, C=US.

In some instances, it may be necessary to have an Organization appear below an Organizational Unit. This might happen if you have your Organization Unit has it own Organizations.

Below is a visual example of an LDAP hierarchical structure.



This chapter covers the following topics:

- ”Using LDAP with Ektron CMS400.NET” on page 859
- ”LDAP Screen Descriptions” on page 871
- ”Disabling LDAP Authentication” on page 875

Using LDAP with Ektron CMS400.NET

NOTE Active Directory and LDAP are not the same. While they can perform some similar functions, LDAP when used with Ektron CMS400.NET only verifies user login information and creates the user in the everyone group. Active Directory can can be used to verify user login information only or it can become completely integrated with Ektron CMS400.NET. To learn more about using Active Directory with Ektron CMS400.NET, see ”Active Directory Feature” on page 804

The following sections explain how to use LDAP with Ektron CMS400.NET.

- ”Enabling LDAP” on page 860

- ”Adding an Organizational Unit During Setup” on page 863
- ”Adding User Information from an LDAP Server to Ektron CMS400.NET” on page 864
- ”Editing User Information in Ektron CMS400.NET” on page 870
- ”Deleting Users” on page 871

Enabling LDAP

You enable LDAP through the Active Directory Setup screen. To enable the LDAP functionality in Ektron CMS400.NET, follow these steps.*See Also:* ”The Active Directory Setup Screen” on page 871

IMPORTANT! Before enabling LDAP in Ektron CMS400.NET, make sure your LDAP server is set up and ready for use. Be sure to include an Ektron CMS400.NET administrator account for yourself. Once you enable LDAP, the only account available to access Ektron CMS400.NET without LDAP authentication is the BuiltIn account. For more information on the BuiltIn account, see ”BuiltIn User” on page 30.

1. In the *webroot**siteroot*\web.config file, change the following line:

   ```
   <add key="ek_AUTH_Protocol" value="None"/>
   ```

   becomes

   ```
   <add key="ek_AUTH_Protocol" value="LDAP"/>
   ```

2. Save and close the Web.config file.
3. In the Workarea, navigate to the **Settings > Configuration > Active Directory > Setup screen**.
4. Click the **Edit** button ( ).
5. On the Active Directory Setup screen, choose **Enable LDAP Authentication**.
6. Fill in the following fields.

Field	Description	For more information, see
Type	Choose the type of LDAP authentication you are using. Note: Depending on your choices, the fields below may be required or disallowed. The following choices are available: • Active Directory (LDAP) - Domain allowed, Organization is not. • Novell eDirectory/NDS - Organization allowed, Domain is not. • Sun Iplanet/JSDS - Domain allowed, Organization is not. • Other - Allows both Domain and Organization	"Using Active Directory for LDAP" on page 862
LDAP Server	The IP Address or name of the LDAP server	
Port	The LDAP server port that Ektron CMS400.NET communicates with. If you are unsure, consult the documentation provided with your Directory Service (such as, Novell, iPlanet, Microsoft, or Red Hat).	
Organization	The name of your company or organization. For example, Ektron, Inc. This field can be blank if you enter a domain in the **Domain** field.	
Domain	The name of the domain you are using. For example, www.ektron.com. This should be the same name you used when you received your license key. This field can be blank if you enter an organization in the **Organization** field.	
Path	The next levels below your Organization or Domain. These can include multiple levels of Organizational Units. For example, Content Editors, Marketing, East Coast.	

Field	Description	For more information, see
Add	Enter your the path you would like access to in the text field and click the **Add** link. When adding Organizational Units, the paths are comma separated and run from specific to general. For example, ou=Amherst,ou=New Hampshire,o=US Do not add individual Common Names here. Only add Organizational Units that contain the people who should have access to Ektron CMS400.NET. **Important**: You can have additional Organizations below your Organization Units as long as the path on your LDAP server is the same.	"Adding an Organizational Unit During Setup" on page 863 To add a single individual from a different Organizational Unit, see "Adding User Information from an LDAP Server to Ektron CMS400.NET" on page 864
Delete	Choose any Organizational Unit from the multi-selection box and click the **Delete** link.	

7. Click the Save button ( ).

Using Active Directory for LDAP

In the *webroot\siteroot*\Web.Config file, add the Username and Password for ek_ADUsername and ek_ADPassword. For example:

```
<add key="ek_ADUsername" value="mwright@ektron.com" />

<add key="ek_ADPassword" value="mypasswordisthis" />
```

When using LDAP to connect to Active Directory, use the following settings in the Workarea.

NOTE LDAP using AD is NOT the same as AD integration. LDAP integration (independent of server type) does not support groups, only user authentication.

Field	Needed Information
Type	Active Directory (LDAP)
LDAP Server	[IP Address of the AD domain controller]

Field	Needed Information
Port	389
Organization	[leave this blank]
Domain	[dns name of the AD domain] For example: intra.ektron.com
Organizational Unit	[any OUs that you want to draw users from] For example: Support,Users,Ektron Corporate also Engineering,Users,Ektron Corporate

Adding an Organizational Unit During Setup

Things to consider when adding Organizational Units are:

- Should everyone in the OU have access to Ektron CMS400.NET?

  Once LDAP is enabled, users are added to the everyone group upon login. While everyone in the OU has access to Ektron CMS400.NET, every user does not necessarily have permission to edit content. To control permissions, set up user groups, adding each user to a group, and assigning permissions to the group. For more information on user groups, see ”Managing Users & User Groups” on page 720. For more information on assigning permissions, see ”Setting Permissions” on page 776.

- Do users in other Organizational Units need access?

  Sometimes, managers or editors are in a different OU. They need to be added manually, or you need to add their OU.

When adding an Organizational Unit, several entries might cover the same hierarchical path. For example, you might have:

- ou=Pitchers,ou=Players,o=Team
- ou=Players,o=Team
- o=Team

This allows you to authenticate users listed in Pitchers, Players, and Team.

Adding User Information from an LDAP Server to Ektron CMS400.NET

Users at each level are automatically available for adding to Ektron CMS400.NET. You do not have to be at the OU or CN level to add a user. If a user is at the DC or OU level, they are available.

There are three ways to add LDAP user information to Ektron CMS400.NET.

- Have the user log in after LDAP is enabled. As a result, the user appears in the Users list and is added to the Everyone group.

NOTE After a user logs in, some fields on the Add User screen can be filled in manually, such as first and last name. For a description of these fields, see "Fill out the fields according to the table below." on page 867.

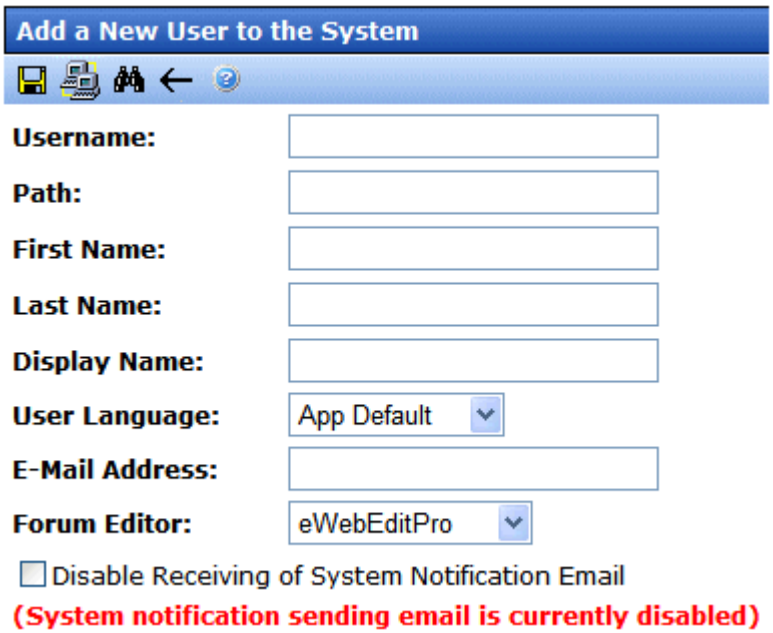
- Search an LDAP server for LDAP users using the LDAP Search feature. *See Also:* "Searching an LDAP Server for Users" on page 864
- Add the user's LDAP information manually. *See Also:* "Steps to Manually Add an LDAP User" on page 866.
- A combination of browsing for the user, then manually completing the remaining fields. *See Also:* "Using the Browse Feature to Add an LDAP User" on page 868

Searching an LDAP Server for Users

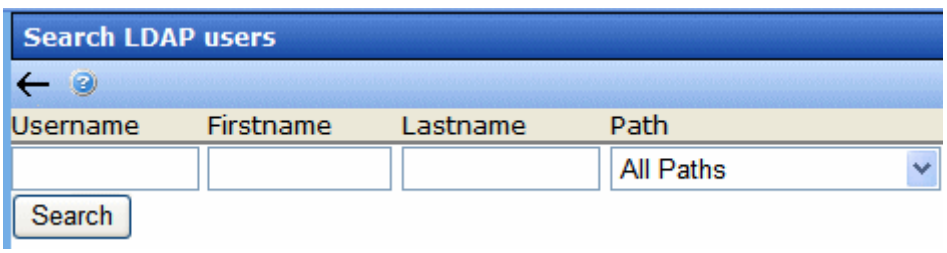
The following steps explain how to search for a user on an LDAP server an add them to the CMS400.NET.

1. Enable LDAP by following the instructions in "Enabling LDAP" on page 860.
2. From the left side of the Workarea, click **Users**.
3. Click the Add Users button ( ).

4. The Add a New User to the System screen appears.



5. Click the Browse LDAP button ( ).
6. The Search LDAP Users screen appears.

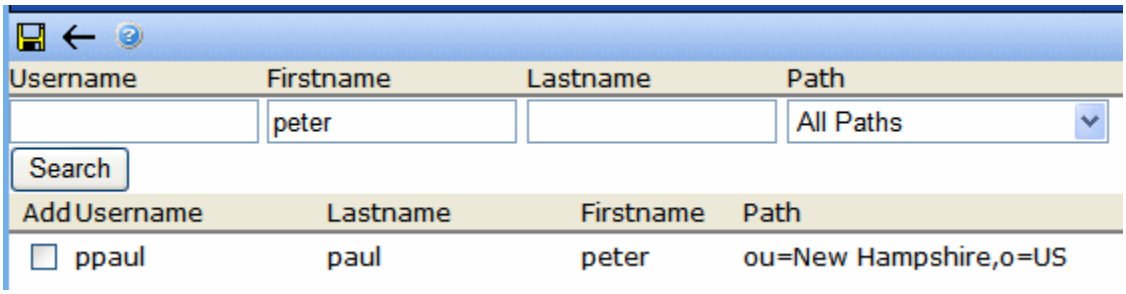


7. Enter search criterion for any of the categories to search.

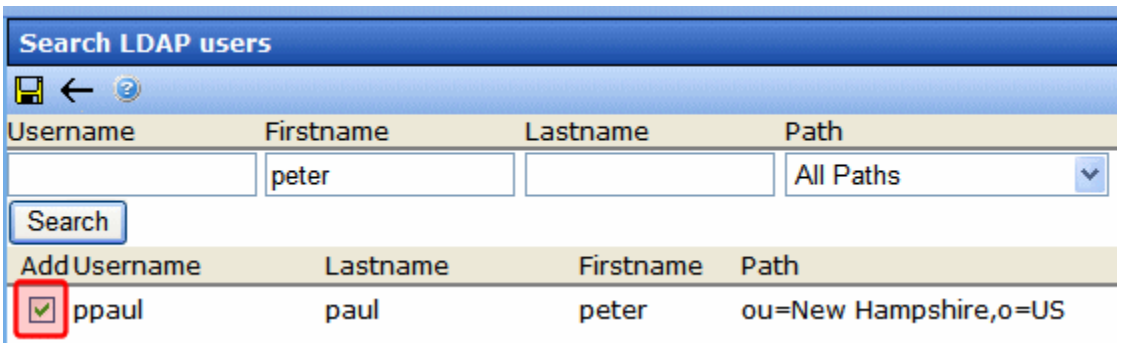
- **Username** - the username of the user on the LDAP server.
- **Firstname** - the first name of the user on the LDAP server.
- **Lastname** - the last name of the user on the LDAP server
- **Path** - select a path from the drop down list. The paths that are available are the same paths that are enabled when configuring the CMS400.NET for use with your LDAP server. If you select a path and enter no other information, you get back all of the users in that path.

8. Click the **Search** button.

9. The search returns any users that match the criteria entered.



10. Click the check box next to the user to be added.



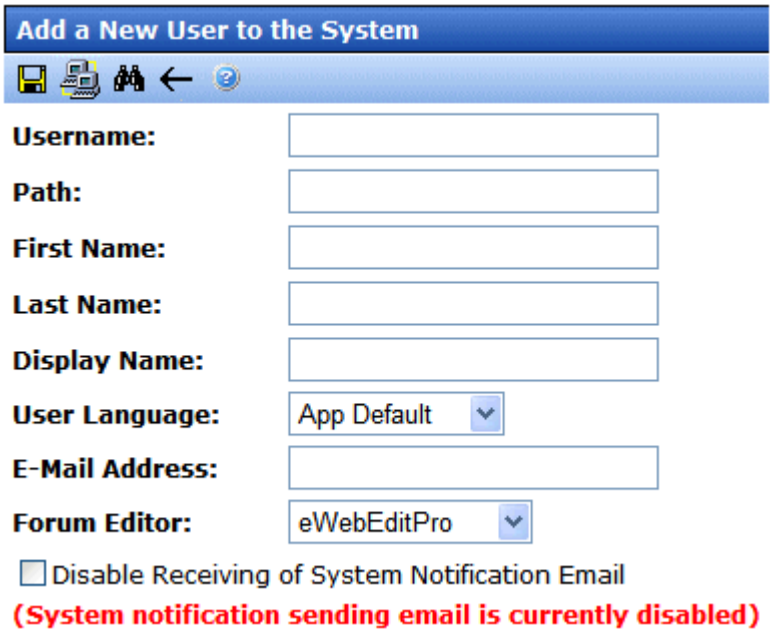
11. Click the Save button ( )
12. The user is now added to Ektron CMS400.NET and added to the Everyone group. To learn about how to assign this user to a specific group, see "Assigning Users To User Groups" on page 731.

Steps to Manually Add an LDAP User

The following steps explain how to add an LDAP user manually.

1. Enable LDAP by following the instructions in "Enabling LDAP" on page 860.
2. From the left side of the Workarea, click **Users**.
3. Click the Add Users button ( ).

4. The Add a New User to the System screen appears.



5. Fill out the fields according to the table below.

Field	Description
Username	The username of the person logging in, as found on the LDAP server.
Path	The path on the LDAP server to the user. For example: `ou=Amherst,ou=New Hampshire,o=US,dc=local`
First Name	The first name of the user.
Last Name	The last name of the user.
Display Name	The name of the user that is displayed in the Forums when using Discussion Boards feature. *See Also:* "Discussion Boards" on page 465

Field	Description
User Language	Select the language in which the user will view Ektron CMS400.NET screens and messages. The language also determines the default value whenever a drop-down list of languages appears within Ektron CMS400.NET. The dropdown list of choices at this field is derived from the Language Settings screen, available from the Settings > Configuration folder. Do not confuse the system language with the user's ability to create and edit foreign editions of content. This field does not prevent a user from working with multiple language content. *See Also:* "Multi-Language Support" on page 876 Note: If the selected language is not English, French or German, it is only supported after you download the Ektron CMS400.NET Language Support Program from Ektron and translate the Web site.
E-Mail Address	Enter the email address of the user.
Forum Editor	If you are using Discussion Boards feature, specify which editor this user uses when editing in the Forums. Choose from eWebEditPro or the eWebEdit400 Editor. For information on Discussion Boards, see "Discussion Boards" on page 465
Disable Email Notification	Select to disable email notifications for this user. If you do, the user will not receive the automatic email notification described in "Automatic eMail Notification" on page 1074. However, this field has no effect on the user's ability to receive instant email.

6. Click **Save** ( ) to add LDAP users to Ektron CMS400.NET.
7. The View Users in Group Everyone screen appears, displaying the new user and the other Ektron CMS400.NET users. To learn about how to assign this user to a specific group, see "Assigning Users To User Groups" on page 731.

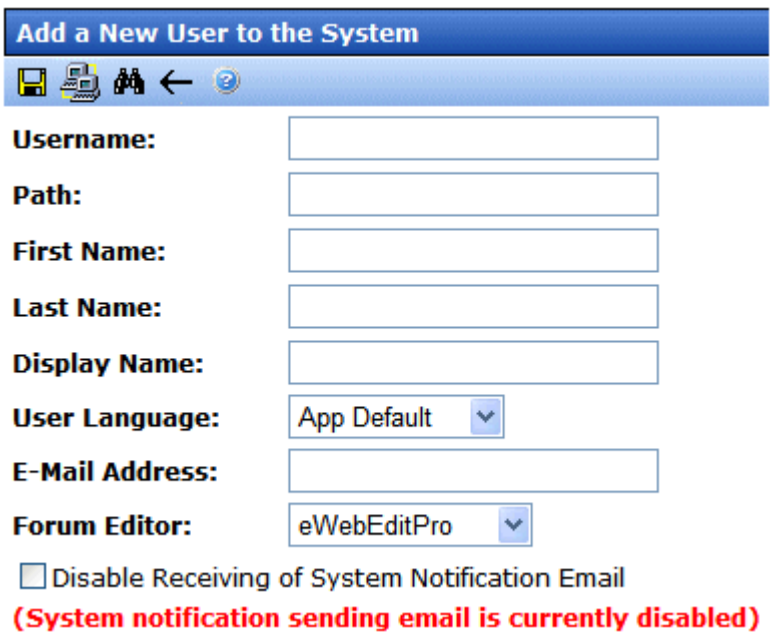
Using the Browse Feature to Add an LDAP User

The Browse LDAP feature provides a more friendly and intuitive way to find the username, domain/organization and organizational unit(s).

IMPORTANT The default server IP/DNS name and port are taken from the settings specified in the **Configuration > Setup** page. These settings must be specified before connecting to the LDAP server. *See Also*: "Enabling LDAP" on page 860

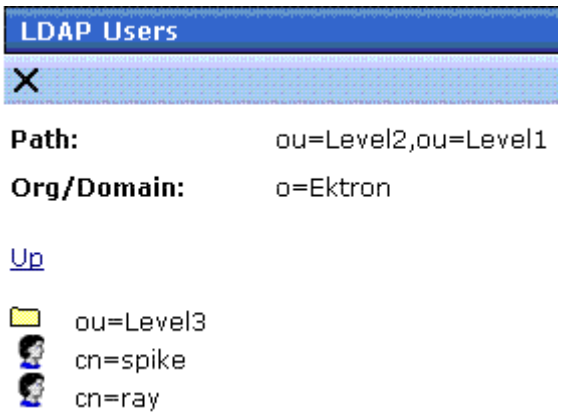
IMPORTANT An Organizational Unit that can see the user to be added must be specified in the **Configuration > Setup** page before using the browse feature. *See Also*: "Enabling LDAP" on page 860

1. Enable LDAP by following the instructions in "Enabling LDAP" on page 860.
2. From the left side of the Workarea, click **Users**.
3. Click the Add Users button ( ).
4. The Add a New User to the System screen appears.



5. Click the Browse LDAP button ( ).

6. The LDAP Explorer appears.



7. Navigate the LDAP server's folders by clicking on the folder images. Each folder represents an Organizational Unit (OU). When you choose an OU level, its users appear.

NOTE In the LDAP Explorer, the Path and Org/Domain fields update dynamically as you navigate through the LDAP tree.

8. Select a user.
9. The user is now added to Ektron CMS400.NET and added to the Everyone group. To learn about how to assign this user to a specific group, see "Assigning Users To User Groups" on page 731.

Editing User Information in Ektron CMS400.NET

It is important to note that **Ektron CMS400.NET** does not write to the LDAP server. So, while you can change any fields when editing a user in Ektron CMS400.NET, you also need to make these changes in the LDAP server.

Steps to Edit an LDAP User's Information

The following steps explain how to edit an LDAP user's information.

1. In the Workarea, click **Settings** > **Users**.
2. In the Username column, click a user to edit.
3. The View User Information screen appears.
4. Click the Edit button ( ).

5. Change the information as needed. For more information on the fields you can edit, see ”Fill out the fields according to the table below.” on page 867.
6. Click Save ( ).

Deleting Users

If a user is deleted in an LDAP server, Ektron CMS400.NET does not automatically delete the user. However, the user’s login fails because he cannot be authenticated.

In this case, you should delete the user from Ektron CMS400.NET using the Delete User function. *See Also:* ”Deleting a User” on page 730

NOTE If you mistakenly delete all users with administrative privileges, you can still sign in using the builtin user’s username and password. For more information, see ”BuiltIn User” on page 30.

LDAP Screen Descriptions

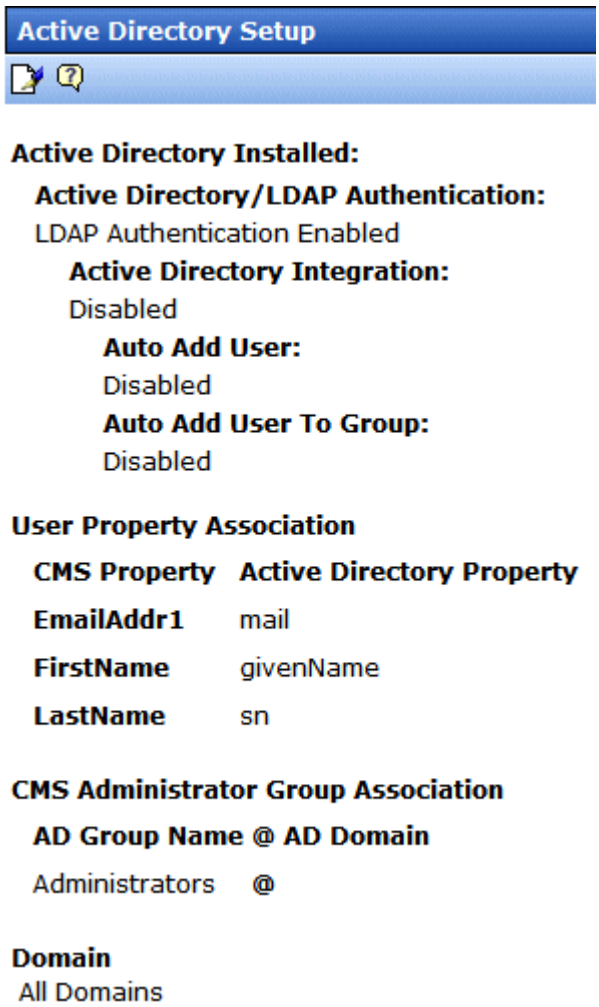
The LDAP feature uses the following screens:

- ”The Active Directory Setup Screen” on page 871
- ”The View Users Screen” on page 872

This section explains how to use each screen.

The Active Directory Setup Screen

The Active Directory Setup screen (illustrated below) lets you enable and disable the Active Directory or LDAP features, as well as determine other aspects of AD management, such as whether users and groups are automatically updated. To access the screen, click **Configuration -> Active Directory -> Setup** from the left panel of the Workarea.



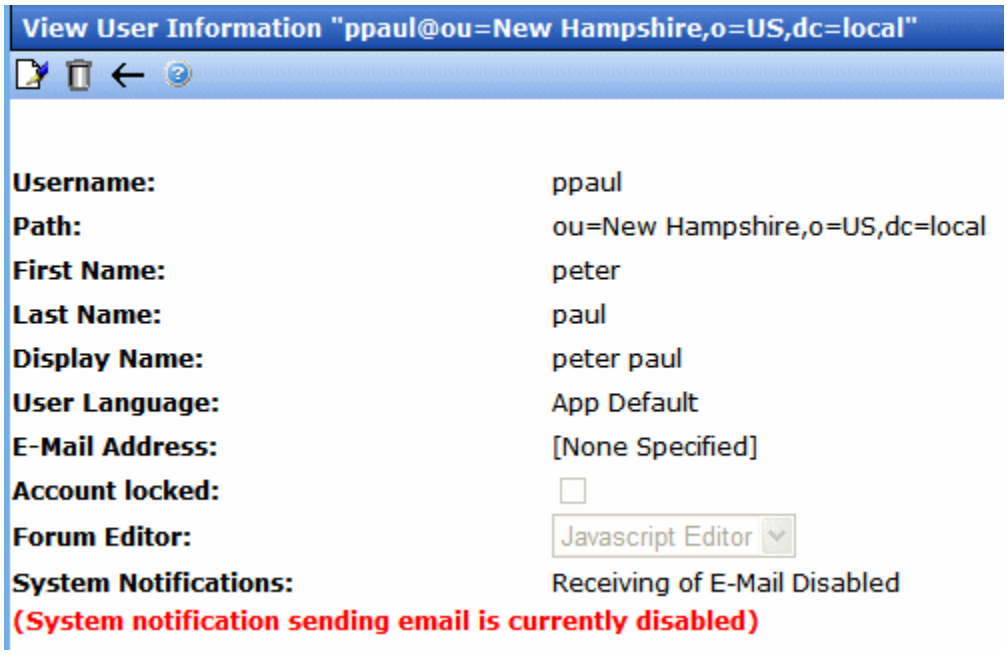
For a description of the fields, see the Active Directory section "The Active Directory Setup Screen" on page 826.

The View Users Screen

The View Users screen (illustrated below) lists all users in the Ektron CMS400.NET database. To access the screen, click **Users** from the left panel of the Workarea. To view more information for a user, click that user to move to the View User Information screen.

The View Users screen also provides a toolbar button ( ) that lets you add LDAP users manually to the Ektron CMS400.NET database. This is useful if you want to add a single user from an Organization that is does not have the same Organizational Unit as the rest of your users, and you do not want to add any other users from that Organization.

The View User Information Screen



The View User Information Screen displays the user's

- username
- Path
- first and last name
- language
- email address and whether the user receives email notifications
- whether the account is locked
- which Forum Editor the user is using
- user groups
- user properties (if any)

The screen also displays the following buttons.

Button	Description
	Edit information on screen
	Delete user *See Also:* "Deleting Users" on page 871
	Return to previous screen
	Launches a help screen

Disabling LDAP Authentication

If you decide to disable LDAP authentication or integration, edit the Active Directory Setup screen and select **Disable Active Directory and LDAP Authentication**.

See Also: "The Active Directory Setup Screen" on page 871

Multi-Language Support

There are several aspects to translating within **Ektron CMS400.NET**. They are listed below.

Type of Translation	Seen by	For more information, see
Content	Content contributors; visitors to your site	”Working with Multi-Language Content” on page 876
Spell check dictionary	Visitors to your site	”Set the Language of Spell Checking” on page 914
Special Character Encoding	Visitors to your site	”Character Encoding” on page 928
Workarea screen labels, alt text, system messages	Content contributors	”Translating the Workarea” on page 929

Working with Multi-Language Content

Ektron CMS400.NET supports the creation of content in any language supported by the Unicode standard. This section explains how to create and work with content in any language.

Overview

First, determine the languages in which your site’s content should appear (see ”Determining Which Languages are Available” on page 880). Then, for any content, you can provide editions in each supported language.

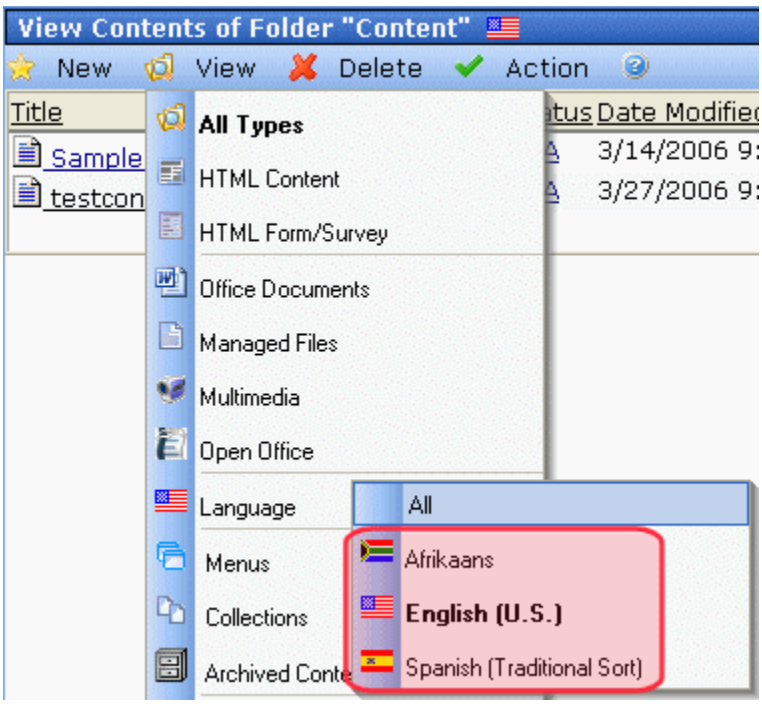
To provide multi-language content, you can either create new content or copy and edit existing content. For example, you can begin the creation of German content by copying English content into it, then translating that content into German and deleting the English content.

All editions of content have the same ID number but are differentiated by the language attribute. As a result, your Web page template can link to a single content item, but what is displayed is determined by the selected language. There are two ways that content's language can be selected:

- a language cookie, which is created when a visitor enters your site and selects a language
- the link to another page includes the language (`langType`) parameter. For example, `mytemplate.aspx?LangType=1033`.

NOTE For a list of the decimal values for each supported language, see Ektron CMS400.NET **Workarea > Settings > Configuration > Language Settings**.

The View Contents of Folder screen's **View** field lets you choose a language then view and create content in that language. You can also view *all* content in the folder, regardless of language. This field makes to easy to find and work on content editions in a selected language.



The View Contents of Folder screen also displays the language of each content item. This helps you distinguish them when viewing all content.

Finally, you can set up a separate approval chain for each edition of a content, and can assign collections and tasks in any supported language.

This section describes how to work with a multiple language Web site through the following topics.

- ”Enabling/Disabling Support for Multiple Language Content” on page 878
- ”Viewing Your Site in Another Language” on page 878
- ”Determining Which Languages are Available” on page 880
- ”The Default Language” on page 882
- ”Creating New Content” on page 883
- ”Translating Content” on page 884
- ”Additional Multi-Language Topics” on page 903
- ”Setting Up a Multilingual Web Site” on page 905
- ”Using a Language Other than American English as the Default” on page 909
- ”Resolving Conversion Issues” on page 910

Enabling/Disabling Support for Multiple Language Content

Support for multi-language content is enabled in the web.config file. To enable or disable it, follow these steps.

1. Open the file `webroot\yourwebsite\web.config`.
2. To enable multi-language content, set the value of `ek_EnableMultilingual` to 1. To disable it, set it to zero (0).
3. Save and close web.config.

Viewing Your Site in Another Language

It’s easy for your site visitors to view your site in any enabled language. On any screen, your developer can display a language drop-down list (circled in red below).

(For more information about the LanguageSelect Server Control which displays this drop-down list, see the **Ektron CMS400.NET** Developer's Manual.) On the sample site provided with **Ektron CMS400.NET**, this drop-down list appears in the lower left corner of the home page, but your developer can place it anywhere on any page.

Another way to indicate which language-edition of content to display is by adding the language parameter (`langType`) to the Quicklink. For example, `products.aspx?LangType=1033` displays the English (US) edition of the products.aspx content. This syntax automatically sets the language cookie.

NOTE For a list of the decimal values for each supported language, see Ektron CMS400.NET **Workarea > Settings > Configuration > Language Settings**.

See Also: "What Happens if Chosen Language is Not Available" on page 879

What Happens if Chosen Language is Not Available

A visitor to your site uses one of the methods listed above to select a language. **Ektron CMS400.NET** uses the following criteria to determine which language edition to display for content.

1. If an edition of the content is available in the selected language, display that.
2. If option 1 is not available, display an edition of the content in the default language (defined in the ek_DefaultContentLanguage variable in web.config).

NOTE When **Ektron CMS400.NET** is installed, the default language is English.*See Also:* "The Default Language" on page 882

3. If neither edition is available, display nothing.

Determining Which Languages are Available

To determine which languages are available for creating content, go to the Workarea and click **Settings > Configuration > Language Settings**. The Language Settings screen lists all languages in which content can be created on your site.

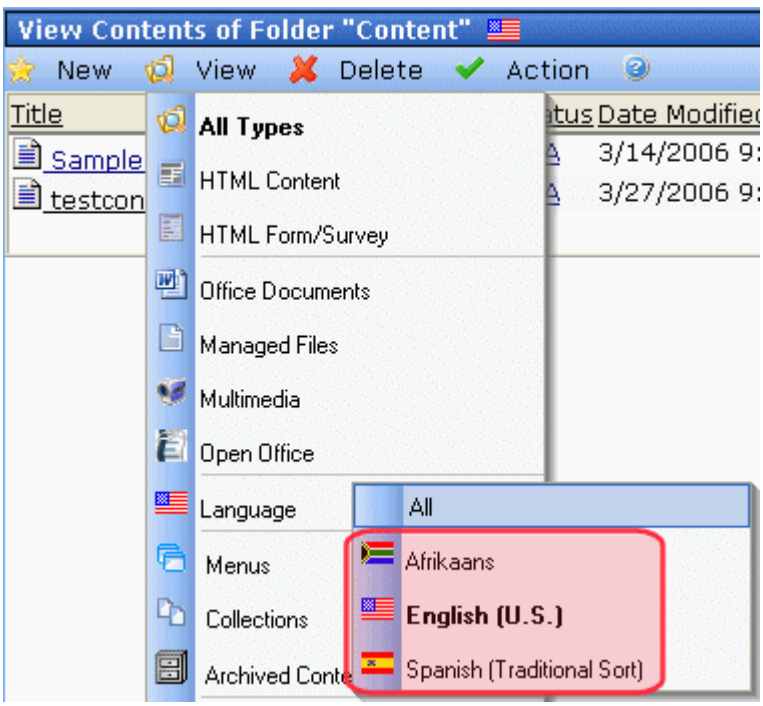
NOTE Only members of the Administrator User Group can view, add, or edit language settings.

To change the list, follow these steps.

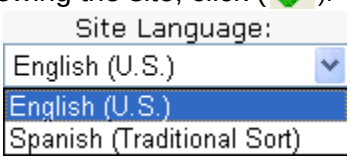
1. Click the Edit button ( ).
2. The Edit Language Setting screen appears.

3. Each language has two check boxes. They are described below.

- To enable a language in the Workarea only, click ( ). If this column is checked, the language populates the language drop-down lists within **Ektron CMS400.NET**, as shown below.



- To enable a language in the Workarea *and* let site visitors select it when viewing the site, click ( ).



So, you can enable languages in the column when you are translating the site but are not ready to make those content items publicly available. When you complete the translation, check the column.

NOTE If you select , the check box in the column is checked automatically. This is because, if you let users view the language on the site, it must be enabled in the Workarea.

NOTE The default content language on a dropdown list is determined in the `ek_DefaultContentLanguage` element of the web.config file.

If you choose only one language on the Language Settings screen, fields that prompt the user to select a language do not appear in **Ektron CMS400.NET**. Instead, all content is created in that language.

The Default Language

The default language determines which edition of content to display when a visitor to your site does not select a language.

It is also used if a visitor selects a language other than the default, then navigates to page for which content does not exist in the selected language. In that case, **Ektron CMS400.NET** displays that content in the default language (if available).

Within **Ektron CMS400.NET**, the default language determines the default value on the language drop-down lists that appear on every page on which a user can select a language.

When you install **Ektron CMS400.NET**, the default language is English.

Use the following procedure to change the default language for your multi-language Web site.

1. Open `webroot\yourwebsite\web.config`.
2. Set the value of `ek_DefaultContentLanguage` to the locale id of the default language. For example, 1031 for German.

NOTE For a list of locale ids, see Ektron CMS400.NET **Workarea > Settings > Configuration > Language Settings**.

3. Save and close web.config.

See Also: ”Using a Language Other than American English as the Default” on page 909

Disabling a Language

To disable any language, uncheck the accompanying checkbox on the Edit Language Setting screen. (For more information, see ”Determining Which Languages are Available” on page 880.)

If you want to disable the default language, you must first assign a new default language. *See Also:* ”The Default Language” on page 882 explains what a default language is and how to assign one.

What Happens to Content When You Disable Its Language

If you disable a language for which content exists, that content remains in the database but no one can access it, either from within **Ektron CMS400.NET** or when visiting your site.

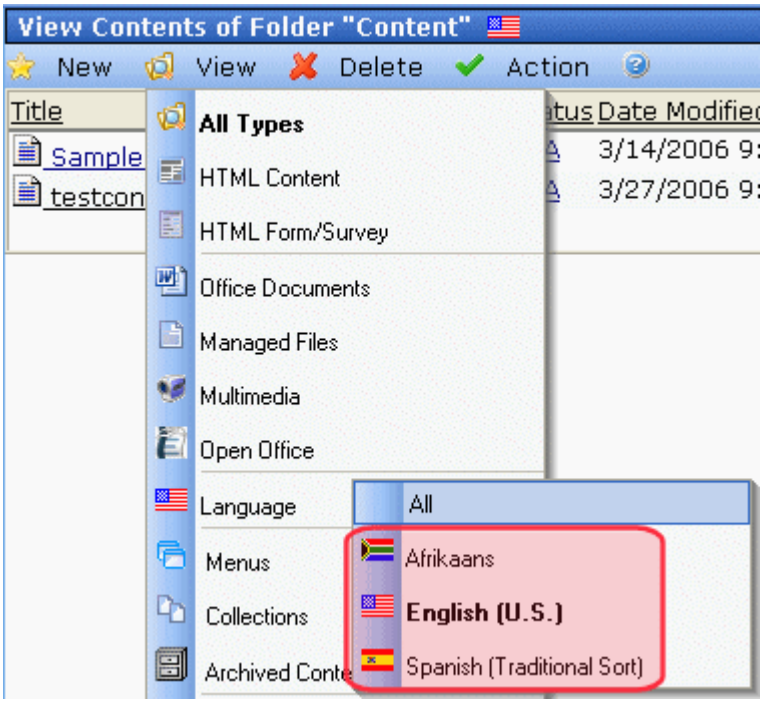
If you later enable that language, the content is once again available.

Creating New Content

To create content in a non-English language, follow these steps.

1. Navigate to the content folder in which you want to create the content. (You must have permission to add content to the folder.)
2. From the language drop-down list, select the language in which you want to create the content.

.



If the desired language is not available, see "Determining Which Languages are Available" on page 880.

3. Click the Add Content button ( ) and create the content as you would any content.
4. In order to add metadata to a content, metadata specifications must have been created for the selected language.*See Also:* "Metadata" on page 118

Translating Content

When translating content into a foreign language, you have three options.

Option	For more information, see
Copy original content into a new content item in a new language. Then, translate content manually.	"Translating Content Manually" on page 885

Option	For more information, see
Use the computer-based translation tool provided with **Ektron CMS400.NET**.	"Using Machine Translation" on page 887
Create an XLIFF or XHTML file from existing content. The file is sent to a translation agency and returns translated to the new language(s). Then, import the translated files into **Ektron CMS400.NET**.	"Using the Language Export Feature" on page 890

Translating Content Manually

Use this procedure when you want to initialize new foreign language content with content from a source language, then translate the content manually. This copying should facilitate the translation.

For example, an editor is translating content from French to German. The editor copies the French edition to new content whose language is German. As the editor translates the French edition into German, he deletes the French content. Any images in the content would usually remain, and all formatting (tables, bullets, etc.) is retained.

After signing in to **Ektron CMS400.NET**, you copy content into new content of a different language by either

- navigating the Web site, or
- accessing the Workarea and navigating the folder structure

After copying the original content, translate it into the new language then delete the original text. Both procedures are described below.

Accessing Content via the Web Site

1. Navigate to a page on which you can select the site language. *See Also:* "Viewing Your Site in Another Language" on page 878
2. Select the language into which you want to translate the content.

3. Navigate to content that you want to translate. You must have privileges to add content to this folder. *See Also:* "Setting Permissions" on page 776
4. Right click within the content's border and a small menu appears.
5. Click the Add New Language option ( ).
6. The original language content appears. Translate into the new language then delete the original content.

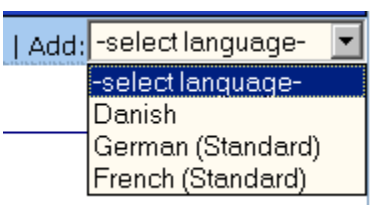
NOTE At this point, you can click the Translate Content button ( ) to have the software translate the content. You can then edit it as needed to perfect the translation.

7. In order to add metadata to content, metadata specifications must have been created for the selected language. *See Also:* "Metadata" on page 118
8. When you save the content, it is saved as the edition of that content in the selected language.

Accessing Content via its Content Folder

To copy content into a new content of a different language, follow these steps.

1. Go to the View Content screen for the content you want to translate. Its status must allow editing (it cannot be submitted or pending).
2. From the View drop-down list, select a original language.
3. Click the content you want to translate.
4. It appears on the View Content screen.
5. Use the **Add** drop down list in the upper right corner to select the language into which you want to translate the content.



6. The original language content appears. Translate into the new language then delete the original content.
7. In order to add metadata to content, metadata specifications must have been created for the selected language.*See Also:* ”Metadata” on page 118
8. When you save the content, it is saved as the edition of that content in the selected language.

Using Machine Translation

Ektron CMS400.NET includes a machine translation feature, which can automatically translate content from/to the following languages.

- Chinese Simplified
- Chinese Traditional
- Dutch
- English
- French
- German
- Greek
- Italian
- Japanese
- Korean
- Portuguese (Brazilian)
- Russian
- Spanish

NOTE Currently, machine translation is not supported for all languages in the Language Settings screen.

Like most software-based translation, someone fluent in the new language should review the translated content to verify that the translation is appropriate within the context of the page.

The machine translation feature lets you choose a glossary (that is, a field, industry, or subject area). This helps the software find the best translation for a term or phrase with different meanings in different fields.

To use the machine translation feature, follow these steps.

Accessing Content via the Web Site

1. Navigate to a page on which you select the site language. *See Also:* "Viewing Your Site in Another Language" on page 878
2. Select the language into which you want to translate. If you do not see the language on the language selector dropdown, you need to enable the language. *See Also:* "Determining Which Languages are Available" on page 880
3. Navigate to content you want to translate.

NOTE You must have privileges to add content to the folder.*See Also:* "Setting Permissions for a Content Folder" on page 780

4. Right click within the content's border. A menu appears.
5. Click the Add Content button ( ).
6. The original language content appears.
7. If the screen uses a Smart Form, select the text that you want to translate.

NOTE You cannot use Machine Translation to translate field names in a Smart Form. XLIFF files are a good way to translate XML field names.*See Also:* "Using the Language Export Feature" on page 890

8. Click the Translate Content button ( ).
9. The Translation screen appears.

10. Select the source (old) and target (new) languages.

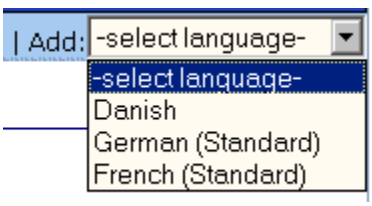
11. If the content should refer to a specific glossary, select one from the dropdown list.
12. Click the **Translate** button.
13. The translation appears. If it looks OK, press **Paste Content**.
14. The translated content replaces the original content in the editor. Modify as needed.
15. In order to add metadata to content, metadata specifications must have been created for the selected language.*See Also:* "Metadata" on page 118
16. When you save the content, it is saved as the edition of that content in the selected language.

Accessing Content via its Content Folder

To machine translate content by identifying its content folder, follow these steps.

1. In the Workarea, navigate to the content folder that contains the content you want to edit.
2. Click **View > Language** and select an original language (that is, the language from which it will be translated).
3. Click the content you want to translate. Its status must allow editing (that is, its status cannot be submitted or pending).
4. It appears on the View Content screen.
5. Use the **Add** dropdown list in the upper right corner to select a new language for the content.

   If you do not see the language on the dropdown, you need to enable the language. *See Also:* "Determining Which Languages are Available" on page 880



6. The original language content appears. Edit the title if appropriate.

7. Click the Translate Content button ( ).
8. The Translation screen appears.

9. Select the source (old) and target (new) languages.
10. If the content should refer to a specific glossary, select one from the dropdown list.
11. Click the **Translate** button.
12. The translation appears. If it looks OK, press **Paste Content**.
13. The translated content replaces the original content in the editor. Modify as needed.
14. In order to add metadata to content, metadata specifications must have been created for the selected language.*See Also:* ”Metadata” on page 118
15. When you save the content, it is saved as the edition of that content in the selected language.

NOTE When the View Contents of Folders screen reappears, it is probably set to the source language. In this case, you do not see the new content in the target language. To see it, click **View > Language** and select **All** or the target language.

Using the Language Export Feature

The Language Export feature lets you copy content into XLIFF files that can be submitted to a translation agency. The agency translates the files and returns them. In the final stage, you import the translated content back into **Ektron CMS400.NET**.

The Language Export feature lets you translate the following kinds of CMS information.

- content, including summary, comments, and meta data
- forms, including response message, comments, and meta data
- all menus (you cannot choose individual menus)
- file assets (files managed by the DMS, including Office documents, Open Office documents, managed files, etc.)
- taxonomies

The Language Export Feature is explained through the following topics.

- ”What is XLIFF?” on page 891
- ”Overview of Exporting/Importing Translation Files” on page 892
- ”Creating the .zip File” on page 892
- ”Importing Translated Files into Ektron CMS400.NET” on page 897
- ”Applying Translated Metadata to Translated Content” on page 900

What is XLIFF?

XLIFF (XML Localization Interchange File Format) is a format that's used to exchange localization data between participants in a translation project. This special format enables translators to concentrate on the text to be translated, without worrying about text layout. The XLIFF standard is supported by a large group of localization service providers and localization tools providers.

To learn more about XLIFF, visit these Web sites:

- http://www-106.ibm.com/developerworks/xml/library/x-localis/
- http://www-106.ibm.com/developerworks/xml/library/x-localis2/
- http://www.xliff.org/

Supported Versions of XLIFF

Ektron CMS400.NET supports the following versions of the XLIFF standard: 1.0, 1.1, and 1.2. You specify the version you are exporting in the web.config file, using the `ek_XliffVersion` element. Any version listed above can be imported.

Overview of Exporting/Importing Translation Files

1. You select content to translate. You can select:
   - a content item
   - a folder (all content in the selected folder is selected; all subfolders of the selected folder may be included)
   - all menus
   - one or more taxonomies
2. **Ektron CMS400.NET** converts the selected content to XLIFF files. You can prepare the files for translation into several languages at once.

   A separate .xlf file is created for each item. Then, all .xlf files for a language are compressed into one .zip file. A separate .zip file is created for each language.
3. Transmit the.zip files to a translation agency, which converts them into the new language(s).
4. The translation agency returns the files.
5. Import them into **Ektron CMS400.NET**. If the editions of the content do not exist in the target language, they are created.

Creating the .zip File

To create one or more .zip files for translation, follow these steps.

Note

Only members of the Administrator User Group and those defined in the Manage Members for Role: XLIFF-Admin screen can create or import XLIFF files. *See Also:* "Using the Roles Screens" on page 796.

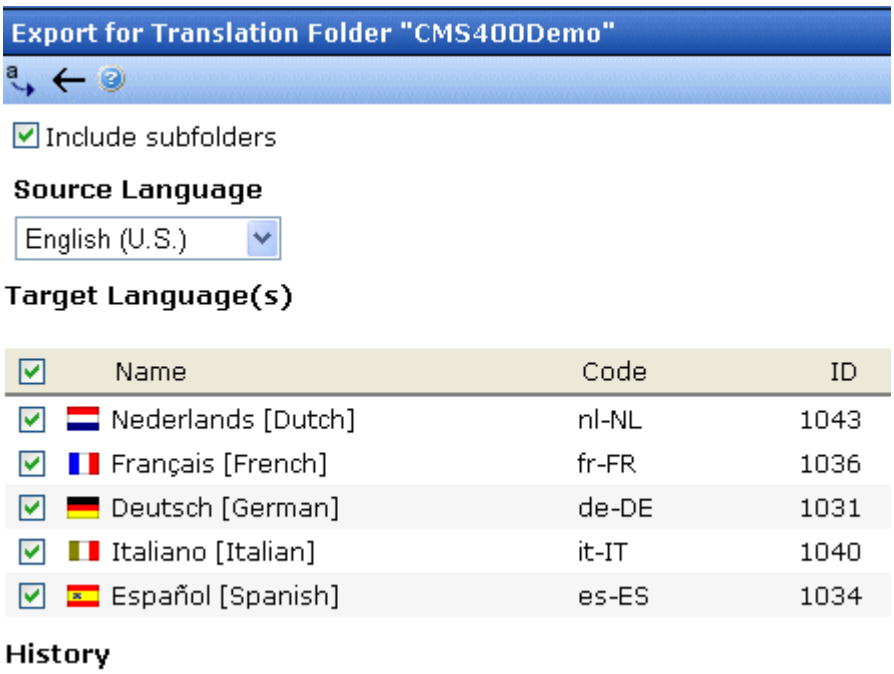
1. To translate *one content item*, navigate to its folder then click it.

   To translate *all content in a folder* (and, if desired, all of its subfolders), navigate to its View Contents of Folder screen.

   To translate a menu, go to **Modules > Menus**.

To translate a taxonomy, go to **Modules > Taxonomy** and check the taxonomies to translate.

2. Click the Export for Translation button ( ). (On the View Contents of Folder Screen, click **Action > Export for Translation**.)
3. The Export for Translation screen appears.

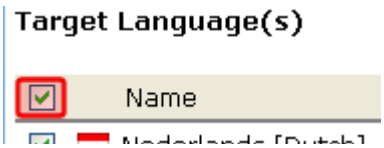


NOTE The **Include Subfolders** field only appears if you click the Export for Translation button from the View Contents of Folder screen.

4. If you want to include content in all of the selected folder's subfolders, check **Include Subfolders**. To translate just the selected folder, uncheck it.
5. The language of items being translated appears in the **Source Language** pull-down. If this is not the correct source language, click the down arrow and select the correct one.
6. All languages enabled in the Language Settings screen are selected under **Target Language(s)**. (*See Also:* "Determining Which Languages are Available" on page 880).

7. To translate the content into *all* languages, proceed to the next step.

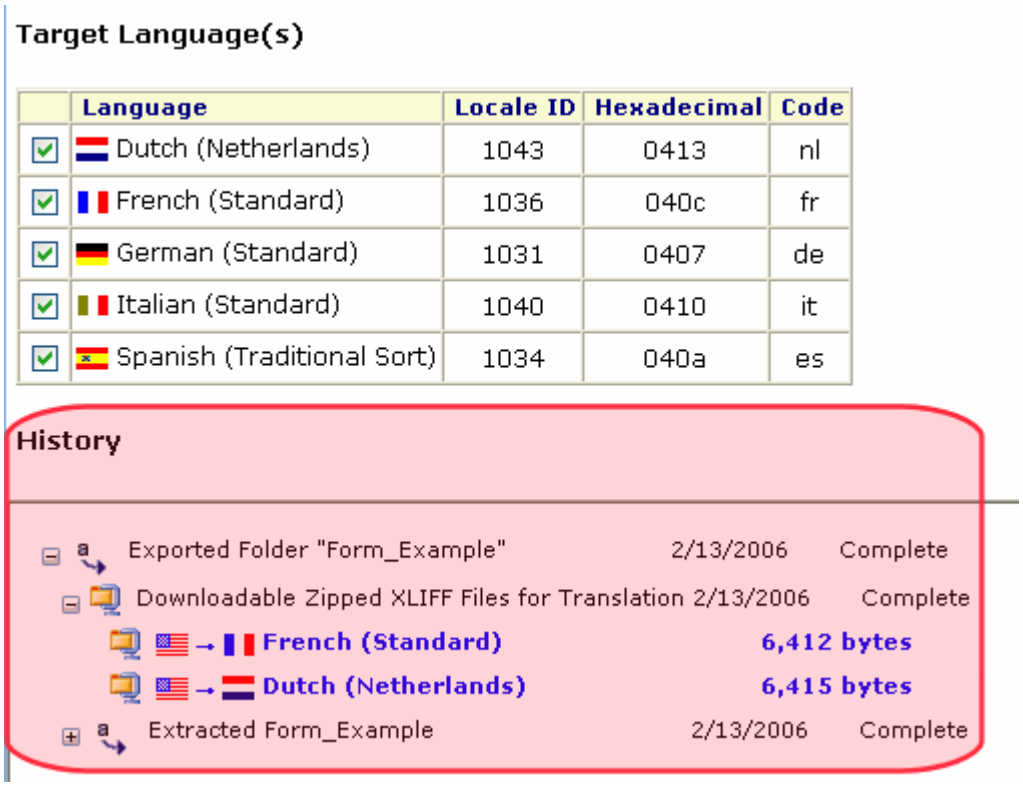
   To translate the content into *some* languages, uncheck the languages that you do not want. You can uncheck the box in the header row (illustrated below) to uncheck all, then only check the ones you want.



8. Click the Create XLIFF Files for Translation button ( ).
9. **Ektron CMS400.NET** creates one .zip file for each language. The .zip file includes an XLIFF file for each selected content item.

NOTE If any selected folder contains content in a target language whose edit date is more recent than the source language edition, that content is excluded from the .zip file. Ektron CMS400.NET assumes that, since a more recent target-language edition exists, you do not want to translate the corresponding source language edition.

The **History** section of the Export for Translation screen displays the translated files.



Target Language(s)

	Language	Locale ID	Hexadecimal	Code
☑	Dutch (Netherlands)	1043	0413	nl
☑	French (Standard)	1036	040c	fr
☑	German (Standard)	1031	0407	de
☑	Italian (Standard)	1040	0410	it
☑	Spanish (Traditional Sort)	1034	040a	es

History

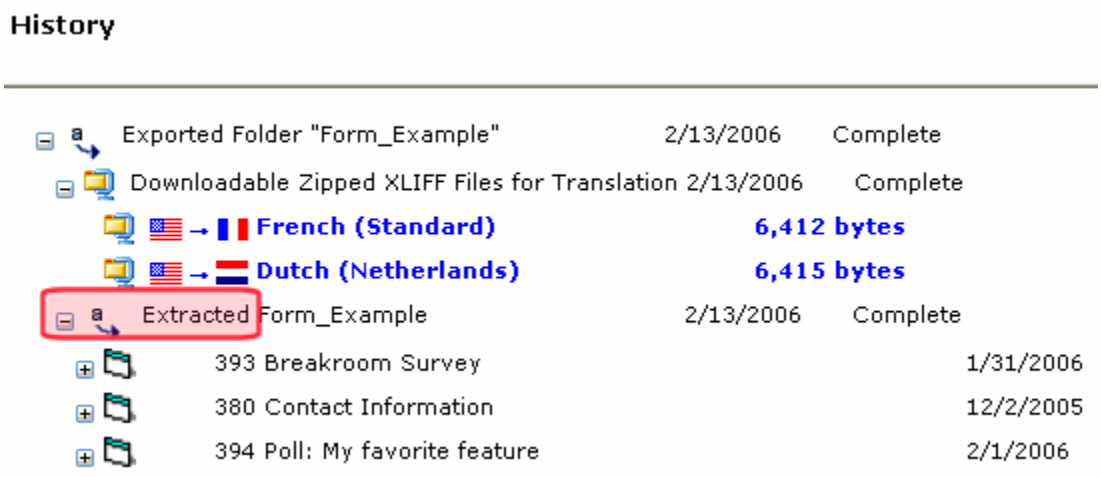
Exported Folder "Form_Example"	2/13/2006	Complete
Downloadable Zipped XLIFF Files for Translation	2/13/2006	Complete
→ French (Standard)	6,412 bytes	
→ Dutch (Netherlands)	6,415 bytes	
Extracted Form_Example	2/13/2006	Complete

The history lists the .zip file created for each language. (.zip files are indicated by the WinZip icon ( ).) To the right of the icon are

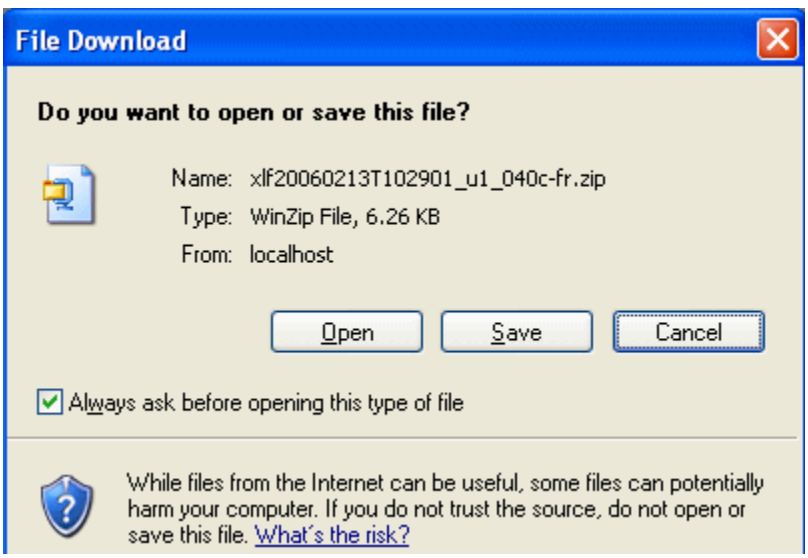
- the flag of the source language
- an arrow indicating the direction of the translation
- the flag and name of the destination language
- the size of the zip file

NOTE The top of the history window displays the most recently exported/imported files.

10. If you want to review the items in a zip file, click the plus button next to **Extracted**. When you do, each content item's ID number, title, and last edit date appear.


History
Exported Folder "Form_Example" 2/13/2006 Complete
Downloadable Zipped XLIFF Files for Translation 2/13/2006 Complete
French (Standard) 6,412 bytes
Dutch (Netherlands) 6,415 bytes
Extracted Form_Example 2/13/2006 Complete
393 Breakroom Survey 1/31/2006
380 Contact Information 12/2/2005
394 Poll: My favorite feature 2/1/2006

11. Click the blue text of a .zip file. The File Download window appears.


File Download
Do you want to open or save this file?
Name: xlf20060213T102901_u1_040c-fr.zip
Type: WinZip File, 6.26 KB
From: localhost
Open
Save
Cancel
Always ask before opening this type of file
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?

NOTE If you want to review the XLIFF files within the .zip file, click **Open**.

12. Click the **Save** button. The Save As window appears. Navigate to the folder where you want to place the zip file and click **Save**.
13. Transmit the files to the translation agency.

NOTE When XLIFF files are returned by the translation agency, their extension must be .xlf. Other than that, the file name is not important.

File Naming Patterns

File Type	Pattern
XLIFF	*item identifier*[*item ID*]_[*new language hexadecimal code*][*two letter new language code*].xlf • *item identifier* options: - content: **cont** - form: **form** - menu: **s** - menu item: **s** - taxonomy: **t** • *item ID* varies, depending on whether the item is content, a form, a menu, or a menu item - content: content ID number - form: form ID number - Menu: menu ID number - Menu item: menu ID number
Zip	xlf[*timestamp in format yyyymmddThhmmss*]_u[*user ID*] _ [*new language hexadecimal code*]-[*two letter language code*].zip The user ID indicates which user performed the export or import.

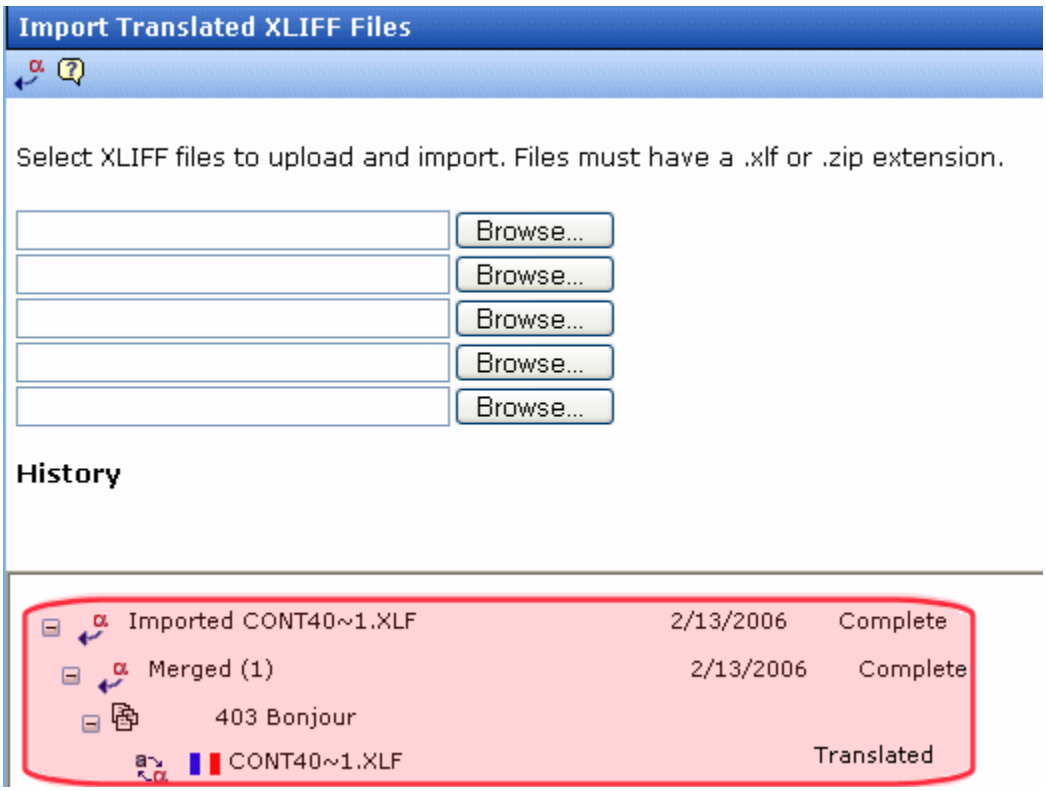
Importing Translated Files into Ektron CMS400.NET

To import translated files into **Ektron CMS400.NET**, follow these steps.

Note Only members of the Administrator User Group and those defined in the Manage Members for Role: XLIFF-Admin screen can create or import XLIFF files. *See Also:* "Using the Roles Screens" on page 796.

1. Go to **Workarea > Modules > Import XLIFF Files**.
2. Click the **Browse** button and navigate to the folder that contains the translated files.
3. Select the files to import.
4. Click the Upload and Import button ( ).

5. **Ektron CMS400.NET** creates new or updates existing foreign-language editions of the imported content/menu/taxonomy.
6. Information about the imported file appears in the history area of the Import XLIFF Files screen. You can click plus signs (+) to reveal increasing levels of information about the imported content.



When you import the file, the comment **Translated** appears next to it.

For each new edition:

- If the content title is the same as the source edition, the next available number is appended to the title to distinguish it from the source. For example: **Henry Williams(1)**.
- its status matches the status of the source content. Typically, its status is checked out. When imported, it can enter the approval process just like other content.

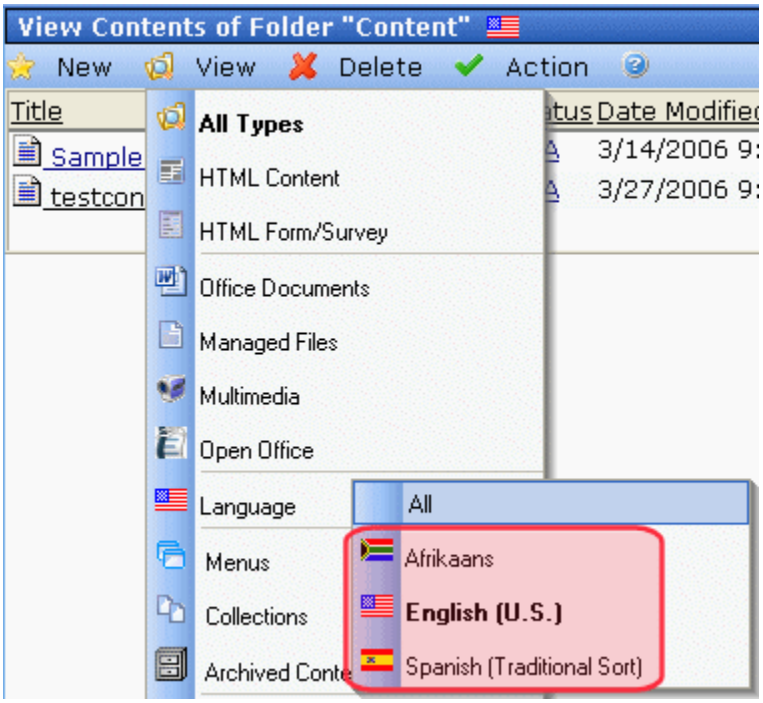
- its history indicates it was checked in at the time the report was run
- for content, the following properties are inherited from the original content:
  - status
  - Smart Form
  - content searchable
  - approval method
- date created and last edit date are captured from when the content is imported
- the last user to edit is captured by user who imported the file

After you import the translation files, **Ektron CMS400.NET** removes them from the file system.

NOTE If an error exists in any of the files, the erroneous files are moved into a subdirectory. The directory is created using a timestamp. For example: `uploadedFiles\localization\merged\xlf20060208T141841_u1\error\.`

Viewing Foreign Language Content

1. Navigate to the folder that contains the content.
2. Click **View > Language** and select the desired language.



3. Only content in that folder and the selected language appears.

You can perform the same activities with this content as any other content.

Applying Translated Metadata to Translated Content

Unfortunately, translated metadata is ignored when importing XLIFF files. This section describes how to have translated metadata applied to the translated content.

Background Information

Although metadata exists in the XLIFF files, it does not appear in the content's metadata even if metadata is defined for that language. This is because metadata definitions have unique IDs across languages.

NOTE While a content ID is the same for a corresponding content block in other languages, the same is not true for metadata.

As a result, the ID for the source language (for example, English) metadata is not automatically mapped to metadata for other languages (for example, Spanish).

To solve this problem, create a mapping between the IDs of metadata definitions of different languages that are synonymous. For example, consider the following metadata definitions.

ID	Name	Language
102	Paper form number	en-US
104	Original page count	en-US
106	Número de papel de la forma	es-ES
108	Cuenta de la página original	es-ES
110	Estado de la minoría	es-ES

In this example, IDs 102 and 106 are synonymous as are 104 and 108. Definition 110, however, only exists in Spanish.

The mapping is stored in an XML file. The mapping informs the XLIFF import process that metadata for ID 102 in English corresponds to ID 106 in Spanish and likewise with 104 and 108.

Setting up the Process to Apply Translated Metadata to Content

1. Open the folder *site root*`/workarea/xslt/` and look for the file metadatadefinitions.xml. If it exists, go to step 2. If it does not, download it from Ektron at `http://dev.ektron.com/uploadedFiles/DevCenter/Support/KB_Articles/XliffMetadata.zip`.

   The zip file includes modified XSLT files that access the XML file.

2. Create metadata definitions in the other language(s). Be sure to use the same data type.

   To do this, log in, open the workarea, go to **Settings > Configuration > Metadata Definition**.

3. Make note of the definitions in the original language (for example, English).
4. Switch to view another language (for example, Spanish) and add a new definition. Assign it the same data type and other properties as the original. Make note of the new ID numbers.

   Create metadata definitions in all languages you wish to support. You may add other languages and define more metadata definitions at any time.
5. Edit workarea/xslt/metadataDefinitions.xml. For each Metadata Definition, enter a <dd> element within the <dl> element. The <dd> element has the following form.

```
<dd title="Name of the metadata definition">

    <dfn id="ID" xml:lang="language-country code"/>

    <dfn id="ID" xml:lang="language-country code"/>

    :

</dd>
```

For example,

```
<dl>

    <dd title="Paper form number">

        <dfn id="102" xml:lang="en-US"/>

        <dfn id="106" xml:lang="es-ES"/>

    </dd>

    <dd title="Original page count">

        <dfn id="104" xml:lang="en-US"/>

        <dfn id="108" xml:lang="es-ES"/>

    </dd>

</dl>
```

The definition for ID 110 is not included because it applies to only one language.

Now that you have set up the xml file, the XLIFF import process accesses the metadataDefinitions.xml file to determine which definitions in the target language (for example, Spanish)

correspond to the definitions in the source language (for example, English).

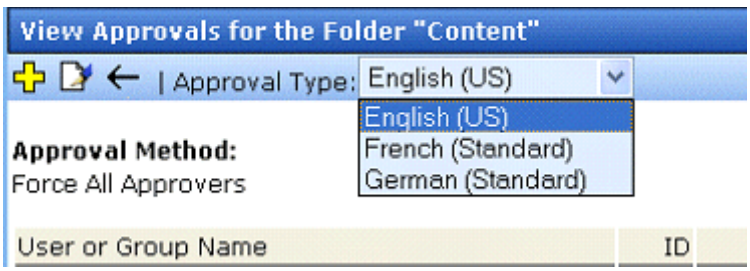
Additional Multi-Language Topics

- ”Multi-Language Approval Chains” on page 903
- ”Working with Tasks in a Multi-Language System” on page 904
- ”Working with Collections in a Multi-Language System” on page 904
- ”Working with Calendars in a Multi-Language System” on page 904
- ”Working with Menus in a Multi-Language System” on page 904
- ”Creating an External Link to a Page of Foreign Content” on page 905

Multi-Language Approval Chains

Just as you can create separate editions of content for each enabled language, you can set up a language-specific approval chain and method. When determining a folder’s approval chain, first select a language then select users and groups with authority to approve content in that folder and that language.

The screen below shows the language selection drop-down list on the View Approvals screen.



Only users in the language-specific approval chain for a folder can approve content in that language.

You can also set a language-specific approval method. *See Also:* ”The Approval Method” on page 792

Working with Tasks in a Multi-Language System

If you create content then add a task to it, the task can be in any enabled language. This would be helpful if, for example, you review English content then want to assign the task of translating it into another language in that language.

If you create a task then try to assign content to it, you can only choose from content in the language of the task.

Working with Collections in a Multi-Language System

In a multi-language **Ektron CMS400.NET** system, you can create a language-specific edition of each collection. For information about doing this, see the **Ektron CMS400.NET** User Manual section "Working with Collections."

Working with Calendars in a Multi-Language System

Calendars can be created in any supported language. Once you enter the calendar and event information in the foreign language, the calendar display (that is, day and month names) automatically appears in that language. Also, regional conventions for first-last days of the week, and date and time formats are maintained.

For more information, see "Creating a Foreign Language Calendar" on page 560.

Working with Menus in a Multi-Language System

NOTE If you are not familiar with the Ektron CMS400.NET's menus feature, please read "Menu Feature" on page 712 and the Ektron CMS400.NET User Manual section "Working with Menus."

You can create an edition of any menu in every supported language. When a site visitor selects a language, navigates to a page that has a menu and clicks the menu link, **Ektron CMS400.NET** displays the menu in the selected language if it is

available. If a menu in that language is not available, nothing appears.

Before creating or translating a menu, it's a good idea to create or translate all content that will be on the menu. In this way, you can link these content items to the new menu. However, after creating a menu, you can always add new items to it.

For details about translating menus, see the **Ektron CMS400.NET** User Manual section "Working with Menus", "Managing Menus", "Working with Menus in a Multi-Language System."

Working with Taxonomies in a Multi-Language System

See "Multi-Language Support for Taxonomies" on page 687

Creating an External Link to a Page of Foreign Content

If another Web site links to a multilingual page on your site, the URL must include the language ID parameter. For example:

```
www.ektron.com/web-content-management-solutions.aspx?LangType=1036
```

Setting Up a Multilingual Web Site

Ektron CMS400.NET supports multilingual content. This section lists steps to follow when setting up such a site.

See Also: "Creating Web Pages that Support Several Languages" on page 907

Step	For details, see
1. In web.config, make sure multilingual support is enabled.	"Enabling/Disabling Support for Multiple Language Content" on page 878

Step	For details, see
2. Set a default content language, one that will be used by the majority of your site's content. If you had a previous version of **Ektron CMS400.NET** and selected a default language on the Database Upgrade Utility, be sure that default language matches the one in web.config.	"The Default Language" on page 882
3. Enable languages your site will support.	"Determining Which Languages are Available" on page 880
4. Add language selection function to templates.	"Viewing Your Site in Another Language" on page 878
5. Create a metadata definition for each supported language.	"Adding a Metadata Definition" on page 129
6. Create or translate content.	• "Creating New Content" on page 883 • "Translating Content" on page 884
7. Change the language of content not in the default language. Note: Only needed if Web site previously had multilingual content.	"Resolving Conversion Issues" on page 910
8. Set up approval chains for new content.	"Multi-Language Approval Chains" on page 903
9. Set up multilingual collections.	"Working with Collections in a Multi-Language System" on page 904
10. Set up multilingual menus.	"Working with Menus in a Multi-Language System" on page 904
11. Modify text on templates.	"Modifying Page Content Based on Language Selection" on page 907
12. Translate graphics.	"Modifying Images Based on Language Selection" on page 908

Creating Web Pages that Support Several Languages

When thinking about setting up your Web site to support content in multiple languages, consider these three actions.

Action	For more information, see
Create language-specific content, menus, collections	• "Translating Content" on page 884 • "Working with Collections in a Multi-Language System" on page 904 • "Working with Menus in a Multi-Language System" on page 904 After you create these items, have the page invoke that item dynamically. When **Ektron CMS400.NET** receives a request to display an item that includes a language and item id number, it returns the language-specific edition. To learn about letting the user select a language from a Web page, see "Viewing Your Site in Another Language" on page 878.
Adjust template content to user language	"Modifying Page Content Based on Language Selection" on page 907
Translate text in images	"Modifying Images Based on Language Selection" on page 908

Modifying Page Content Based on Language Selection

If a template's text should change according to a user's language selection, use a case statement to provide the language-specific content. A good example of this is the template used on the RC international sample site (Illustrated below).

Assume you want to create editions of the menu that runs across the header (**Home**, **Products**, etc.) in three languages:

- English

- French
- German

To do so, follow these steps.

Note This procedure uses the header.asp file delivered with the RC international sample site as an example.

1. In the template file, declare each menu option a variable. For example:

```
Dim t_search, t_products, t_support, t_news, t_careers, t_calendar, t_home, t_login,
t_site_lang, t_contact, t_copyright, calendar_id
```

2. Enter case statements that provide the value of each variable in each language. (1031 is the decimal code for German, 1036 for French.) The following illustrates how to do this for the search menu option.

```
Select Case ContentLanguage

    Case "1031"

        t_search = "Suche"

    Case "1036"

        t_search = “Recherche"

    Case else

        t_search = "Search"

End Select
```

Now, when a user visits a page controlled by this template and selects French or German as the site language, the page is refreshed and the translated values appear on the template.

Modifying Images Based on Language Selection

Many Web page templates also include images that require translation. You can set up templates to invoke images in the user-selected language by following these steps.

1. Add to the library each image that should change when the language changes. For example, if your company’s tag line is translated into three languages, upload the three images into the library.

It‘s a good idea to include the language in the title of the image. For example, tagline_English, tagline_French.

2. Create a separate content block for each language-specific image. Each content block must have a unique ID number.
3. Insert the appropriate image into a content block for each language. For example, insert the tagline_English image into the English content block.
4. Insert the content blocks into the appropriate templates. For example, insert the English content block into the English template.

Using a Language Other than American English as the Default

Use this procedure if your site supports one language only, and it is not American English (1033).

To set your site’s default language to something other than American English, follow these steps.

1. Install a new site. Do not log in at this point.
2. Open your site’s web.config file (located in your site root folder.) Set `ek_EnableMultilingual` to zero (0). Set `ek_DefaultContentLanguage` to the four digit locale id for the desired language.
3. Log in to **Ektron CMS400.NET**.
4. Go to **Settings > Configuration > Language Settings**.
5. Enable the desired language, and disable all other languages.
6. Go to **Settings > Configuration > Setup**.
7. Make sure the desired language is the **Default Application Language**.
8. Go to **Settings > Users > Edit User Information**. Set the **User Language** to the desired language. Do *not* leave **App Default** as the value.
9. Repeat Step 7 for every **Ektron CMS400.NET** user.

Resolving Conversion Issues

IMPORTANT! This section is only relevant to Web sites that upgrade to **Ektron CMS400.NET** Release 4.7 or higher and which, prior to the upgrade, had content in more than one language. If your site does not meet both criteria, you can ignore this section.

When you upgrade to 4.7 or higher, the Database Upgrade utility prompts you to select a language. All content in your site is then assigned that language. (Prior to Release 4.7, content did not have a language attribute.) If all content is not in the selected language, you must resolve that discrepancy.

For example, assume for the sake of simplicity that your pre-4.7 Web site had four content items: three English and one French. During the database upgrade, you select English. Three content items are assigned the correct language, but the fourth content item, which should be assigned French, is also assigned English. You cannot simply change the content's language assignment. When resolving the discrepancy, there are two possible scenarios.

Scenario 1

Prior to 4.7, your site had unique content in French (id number 4). To resolve this, copy the content to a new French edition with the same id number. Then, delete the English edition.

Before Upgrade

Content id	Language attribute	Actual language
1	not available	English
2	not available	English
3	not available	English
4	not available	French

After Upgrade

Content id	Language attribute	Actual language
1	English	English
2	English	English
3	English	English
4	**English**	**French**

After Following Procedure Listed Below

Content id	Language attribute	Actual language
1	English	English
2	English	English
3	English	English
~~**4**~~ **(deleted)**	~~**English**~~	~~**English**~~
4	**French**	**French**

Procedure for Scenario 1

To change a content item's language, follow these steps.

NOTE Before beginning this procedure, make sure

- the correct language for the content is enabled. See "Determining Which Languages are Available" on page 880.
- metadata has been defined for the new language. See "Adding a Metadata Definition" on page 129

1. Within **Ektron CMS400.NET**, navigate to the View Content screen on content item 4.
2. From the Add drop-down list, select French.

3. **Ektron CMS400.NET** creates a French edition of the content.
4. Check in that edition of the content.
5. Delete the English edition of the content.

Scenario 2

Prior to 4.7, your site had English and French content (id numbers 3 and 4) that presented the same content in each language. You want to leave the English content alone, create a French edition of that content with the same id number, then delete the French content.

The advantage of this solution is that both editions of the content have a single id number. So, when a site visitor selects a language and navigates to that page, **Ektron CMS400.NET** displays the edition of the content for the selected language.

To resolve this, create a French edition of the English content, copy the French content, then delete the French content.

Before Upgrade

Content id	Language attribute	Actual language
1	not available	English

2	not available	English
3	not available	English
4	not available	French

After Upgrade

Content id	Language attribute	Actual language
1	English	English
2	English	English
3	English	English
4	**English**	**French**

After Following Procedure Listed Below

Content id	Language attribute	Actual language
1	English	English
2	English	English
3	English	English
3	**French**	**French**
~~4~~ (deleted)	**~~na~~**	**~~na~~**

Procedure for Scenario 2

To solve the language conversion issue explained in scenario 2, follow these steps.

NOTE Before beginning this procedure, make sure

- the correct language for the content is enabled. See "Determining Which Languages are Available" on page 880.
- metadata was defined for the new language. See "Adding a Metadata Definition" on page 129

1. Within **Ektron CMS400.NET**, navigate to the View Content screen of content id 3.
2. From the Add drop-down list, select French.

3. **Ektron CMS400.NET** creates a French edition of content id 3.
4. Translate the title into French.
5. Delete the English elements of content id 3 (content, summary, metadata, schedule, and comments).
6. Check in the French edition of content id 3.
7. Copy and paste all relevant elements of the French content (id 4) into the French edition of content id 3 (content, summary, metadata, schedule, and comments).
8. Delete content id 4.

Set the Language of Spell Checking

Since **Ektron CMS400.NET** provides two editors, there are two procedures for doing this.

- "Setting the Spell Check Language for eWebEditPro+XML" on page 915

- ”Setting the Spell Check Language for eWebEdit400” on page 915

Setting the Spell Check Language for eWebEditPro+XML

To specify which dictionary to reference when checking spelling, specify a language in Microsoft Word, version 2000 or later. To do this, open Word and select **Tools > Language > Set Language**.

Setting the Spell Check Language for eWebEdit400

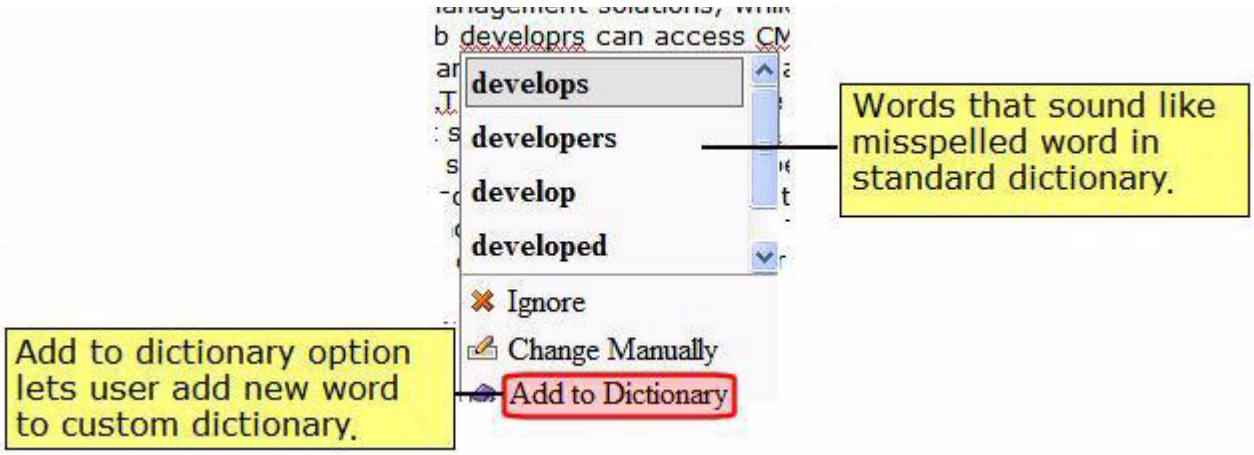
NOTE The **Ektron CMS400.NET** User Manual section “Introduction to eWebEdit400” > “Checking Spelling” provides basic information about spell checking. Please read that before reading this section.

eWebEdit400’s spell checker refers to a *standard dictionary* of the content’s language. So, for example, if the content is U.S. English, the U.S. English dictionary is referenced.

The spell checker also references a language-specific *custom dictionary*. Words are added to this list when a user stops at a misspelled word and chooses the **Add to Dictionary** option.

Both dictionaries reside on the server that hosts **Ektron CMS400.NET**.

The spell checker compares each word against both sources. If a word is in either one, the spell checker moves to the next word. If a word is missing from both sources, the spell check options shown below appear, and the user decides what to do.



The following topics provide more information about **eWebEdit400**'s spelling dictionaries and custom word lists.

- "What Happens if No Dictionary Matches the Content Language" on page 916
- "List of Standard Dictionaries" on page 917
- "Accessing the Spell Check Dictionary Update Screen" on page 918
- "Editing eWebEdit400's Standard Spell Check Dictionaries" on page 918
- "Editing eWebEdit400's Custom Dictionary" on page 927

What Happens if No Dictionary Matches the Content Language

If **eWebEdit400** does not have a dictionary that matches the content language, it proceeds through these steps *in the order shown below*.

1. If the language begins with en (for example, en-AU), use the en-GB dictionary.

   If it begins with zh, use zh-CHS.
2. Each language has a *default version*, indicated by letters before the dash matching the ones after the dash. For example fr-FR. If the default version's dictionary is available, use it.

3. Use the first dictionary (alphabetically) that begins with the content language. For example, the content language is es-AR, but its dictionary does not exist. The first dictionary alphabetically beginning with es that is available is es-CO, so use that.
4. If none of the above is available, use en-US.

List of Standard Dictionaries

eWebEdit400 provides the following standard dictionaries.

Code	Language
uk-UA	Afrikaans
ar-AR	Arabic
bg-BG	Bulgarian
cs-CZ	Czech
da-DK	Danish
de-CH	German (Switzerland)]
de-DE	German
en-GB	English (Great Britain)
en-US	English (United States)
es-ES	Spanish
fr-FR	French
he-IL	Hebrew
it-IT	Italian
nl-NL	Dutch
nn-NO	Norwegian (Nynorsk)

Code	Language
pl-PL	Polish
pt-PT	Portuguese
pt-BR	Portuguese (Brazil)
ru-RU	Russian
sl-SL	Slovenian
sv-SE	Swedish
uk-UA	Ukrainian

Editing eWebEdit400's Standard Spell Check Dictionaries

The following topics explain how to access a screen for working with standard dictionaries, and how to update, edit, replace, and delete individual words as well as entire dictionaries.

- "Accessing the Spell Check Dictionary Update Screen" on page 918
- "Adding a Word" on page 919
- "Deleting a Word" on page 921

NOTE There is no option for editing a word. Instead of editing, delete a word then add the correct version.

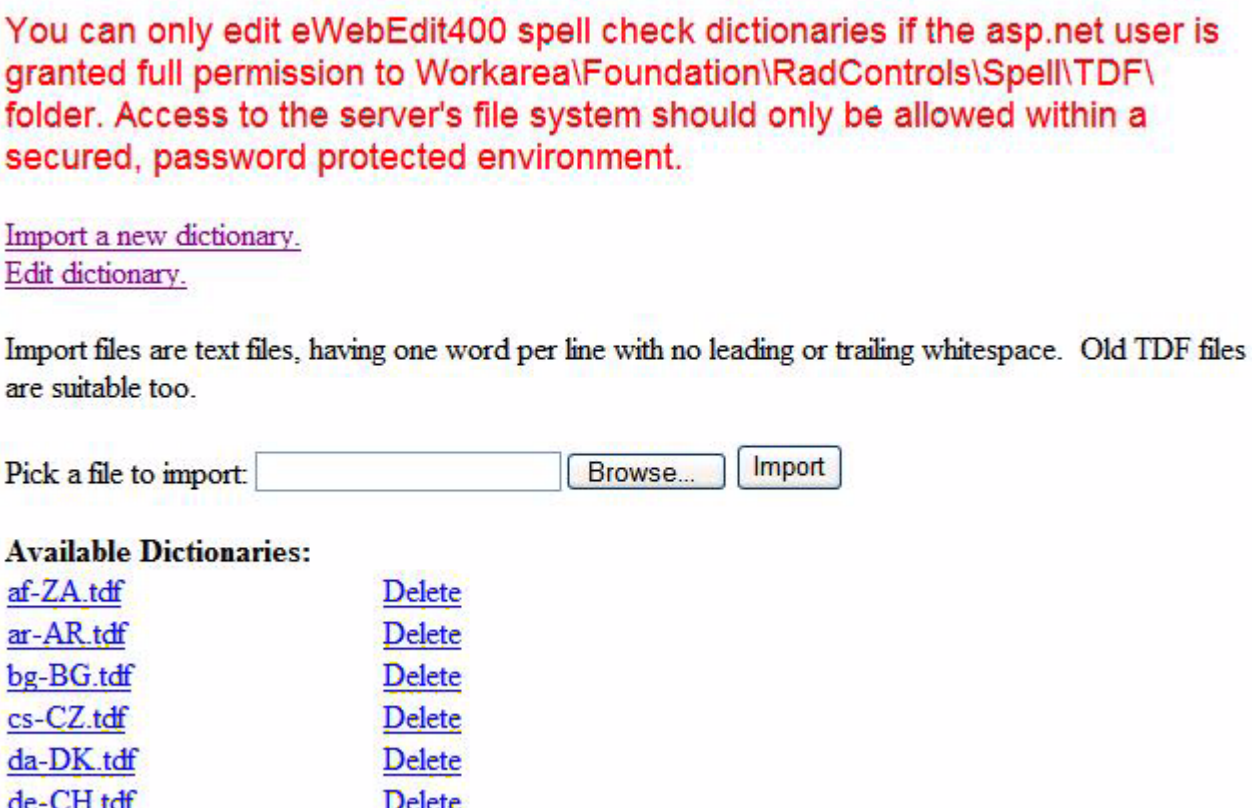
- "Adding a Word List" on page 923
- "Importing a Dictionary" on page 925
- "Deleting a Dictionary" on page 926
- "Replacing a Dictionary" on page 927

Accessing the Spell Check Dictionary Update Screen

eWebEdit400 provides a special screen that allows you to create, update, and delete the standard dictionaries. To access this screen, use this URL:

`http://your server/site root folder/workarea/contentdesigner/dictionaryconfigurator/dictionaryconfigurator.aspx`

This screen looks like this.


You can only edit eWebEdit400 spell check dictionaries if the asp.net user is granted full permission to Workarea\Foundation\RadControls\Spell\TDF\ folder. Access to the server's file system should only be allowed within a secured, password protected environment.
Import a new dictionary.
Edit dictionary.
Import files are text files, having one word per line with no leading or trailing whitespace. Old TDF files are suitable too.
Pick a file to import:
Browse...
Import
Available Dictionaries:
af-ZA.tdf Delete
ar-AR.tdf Delete
bg-BG.tdf Delete
cs-CZ.tdf Delete
da-DK.tdf Delete
de-CH.tdf Delete

NOTE If you want to remove the red text from the top of the screen, open the .aspx file and delete that text.

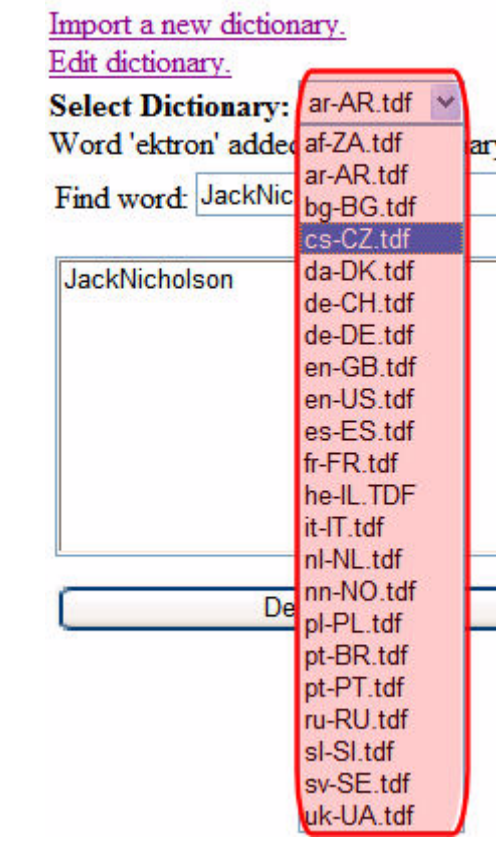
In order to use this screen. the ASP.NET user must be granted read and write permission to the following folder: *your server\site root folder*\Workarea\Foundation\RadControls\Spell\TDF.

TIP! If ASP.NET user has full permission but you still cannot edit a dictionary, open the folder listed above, right click the TDF file and verify it is not read-only.

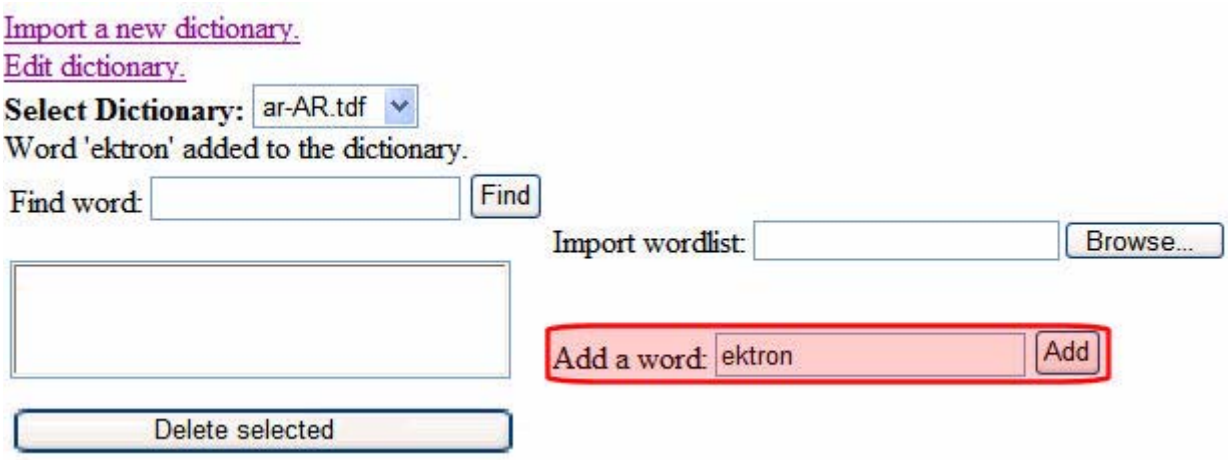
Adding a Word

To add a word to any dictionary, follow these steps.

1. Open the Dictionary Update screen. See "Accessing the Spell Check Dictionary Update Screen" on page 918.
2. Click **Edit Dictionary.**
3. At the **Select Dictionary** dropdown, choose the language of the dictionary you want to update. ("List of Standard Dictionaries" on page 917 describes the codes on the list.)



4. In the **Add a word** field in the lower right corner of the screen, enter the word to add.



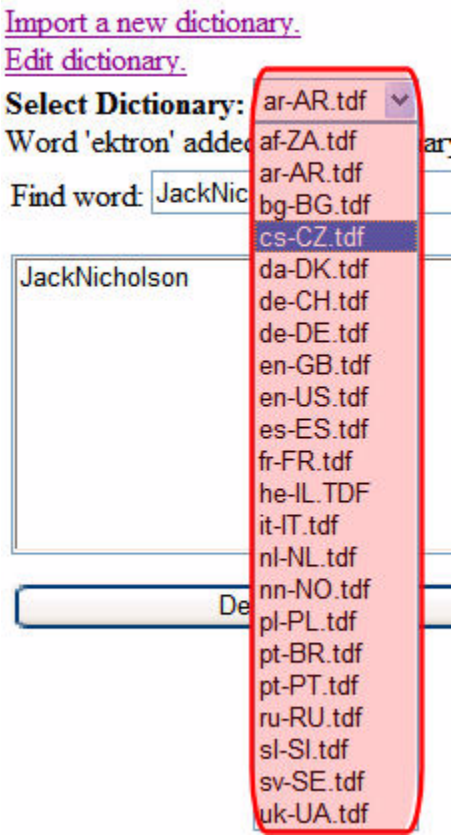
5. Click the **Add** button.

TIP! Enter the word you just added into the **Find Word** field and click **Find** to verify that the word was successfully added.

Deleting a Word

To delete a word from any dictionary, follow these steps.

1. Open the Dictionary Update screen. See "Accessing the Spell Check Dictionary Update Screen" on page 918.
2. Click **Edit Dictionary.**
3. At the **Select Dictionary** dropdown, choose the language of the dictionary you want to update. (The "List of Standard Dictionaries" on page 917 describes the codes on the list.)



4. In the **Find word** field in the top left of the screen, enter the word to delete.

5. Click the **Find** button.
6. In the results box below, click the word.
7. Click the **Delete Selected** button.

TIP! Enter the deleted word into the **Find Word** field and click **Find** to verify that the word was successfully removed.

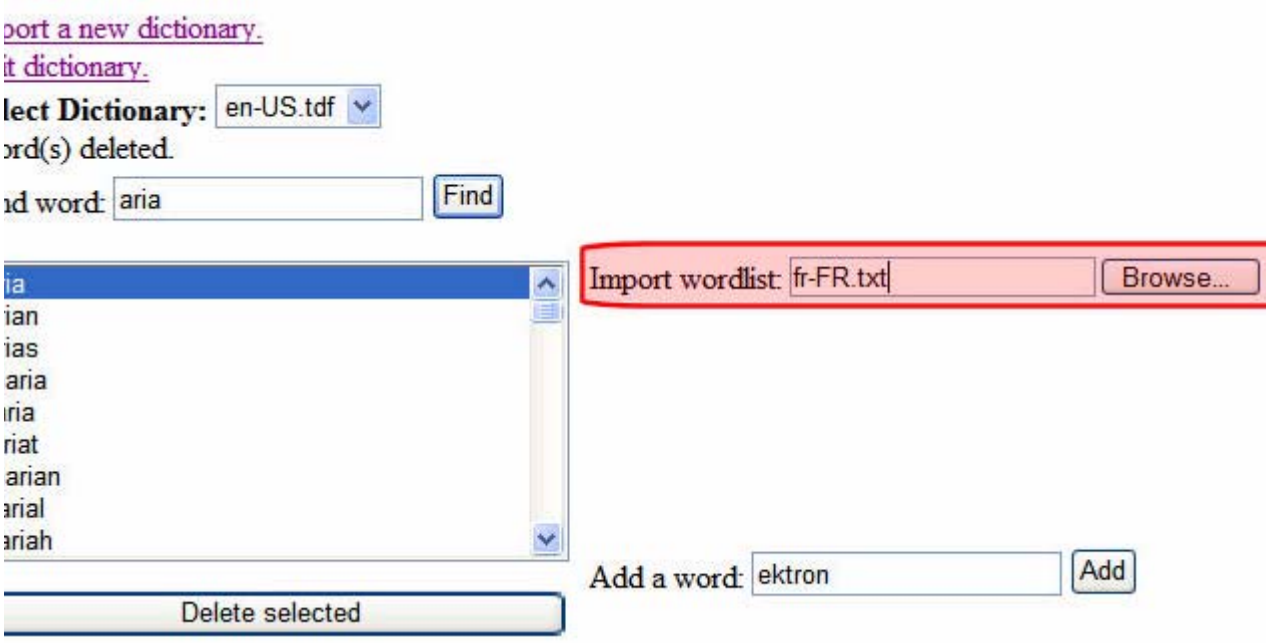
Adding a Word List

You may add a list of words to a standard dictionary. For example, you work in a hospital and want to add medical terms. While you can add words one at a time using "Adding a Word" on page 919, it is more efficient to place all words in a text file then import the file into a dictionary.

To add a list of words, follow these steps.

1. On your server, create a .txt file.
2. Place all words into the .txt file, one on each line.

3. Save the file using the language code of the dictionary you are updating. For example, if you are adding to the French dictionary, name the file fr-fr.txt. *See Also:* "List of Standard Dictionaries" on page 917
4. Open the Dictionary Configurator screen. See "Accessing the Spell Check Dictionary Update Screen" on page 918.
5. Click **Edit Dictionary.**
6. Next to **Import Wordlist**, click **Browse**.



7. Navigate to the text file you saved in Step 3.
8. Click the **Import** button.
9. All words on the list are added to the dictionary whose name matches the .txt file. For example, words in the fr-fr.txt file are added to the fr-FR.TDF dictionary file.

TIP! While on the screen, enter one of the words in the word list into the **Find word** field, then click **Find** to verify that the import succeeded.

Importing a Dictionary

Typically, you want to import a dictionary because the language of some **Ektron CMS400.NET** content is not on the "List of Standard Dictionaries" on page 917. For example, your content is Japanese.

You could also delete a standard dictionary then import one to replace it if you have a word list that you consider superior to the standard dictionary. *See Also:* "Deleting a Dictionary" on page 926.

To import a dictionary, follow these steps.

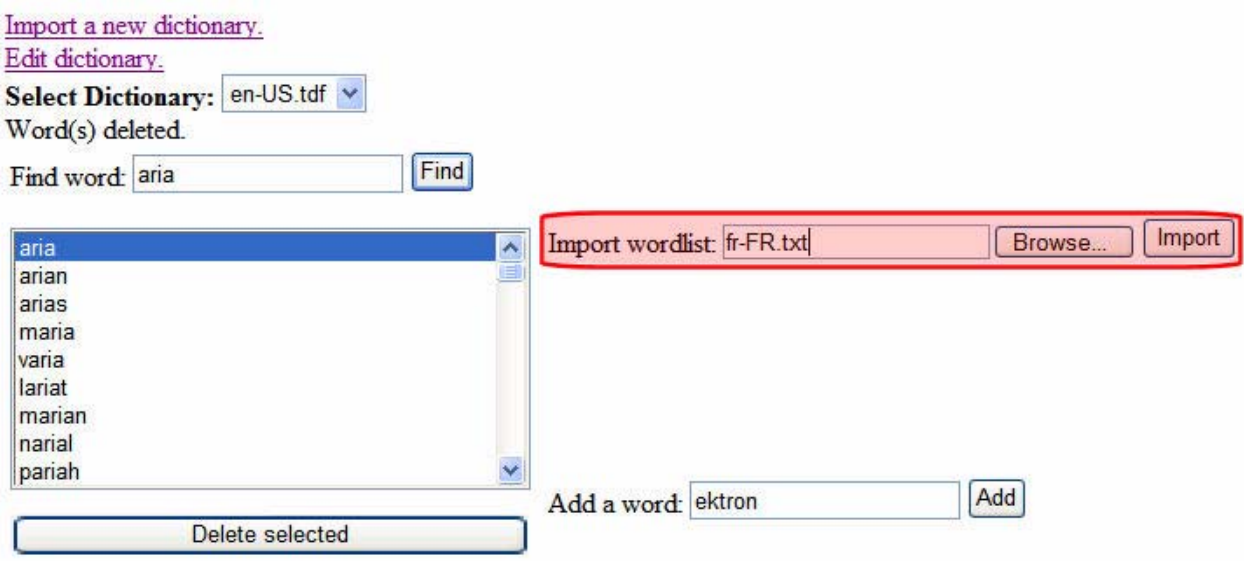
NOTE The following procedure assumes the words do not yet exist in a .TDF file. If they do, open the Dictionary Configurator screen, click the Browse button, select the file, and click **Import**.

Part one: Create a Blank TDF File

1. On your server, use Notepad to create a blank .tdf file named after the language code of the dictionary you are importing. For example, if you are importing a French dictionary, name the file fr-fr.tdf. *See Also:* "List of Standard Dictionaries" on page 917
2. Open the Dictionary Configurator screen. See "Accessing the Spell Check Dictionary Update Screen" on page 918.
3. Next to the **Pick a file to import** field, click **Browse**.
4. Navigate to the .tdf file you created in Step 1.
5. Click the **Import** button. This action places the TDF file into the correct folder.

Part two: Create and Import the Word List

1. Follow the procedure described in "Adding a Word List" on page 923 to insert all dictionary words into a .txt file.
2. Click **Edit Dictionary**.
3. Next to **Import Wordlist**, click **Browse**.



4. Select the text file you created in Step 1.
5. Click the **Import** button.
6. All words in the list are added to the dictionary whose name matches the .txt file name.

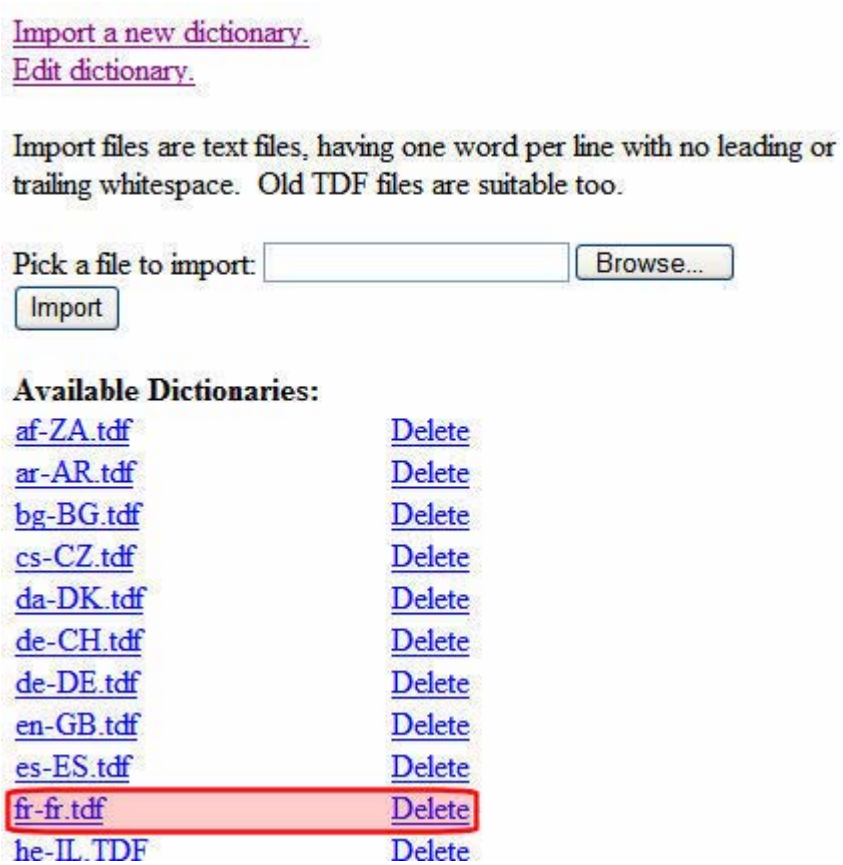
TIP! Use the Edit dictionary screen to select the dictionary. Then, use the **Find word** field to verify that the import succeeded.

Deleting a Dictionary

You would typically delete a standard dictionary in order to replace it if you have a word list that you consider superior to the standard dictionary.

To delete dictionary, follow these steps.

1. Open the Dictionary Configurator screen. See "Accessing the Spell Check Dictionary Update Screen" on page 918.
2. In the available dictionaries list, find the language whose dictionary you want to import.



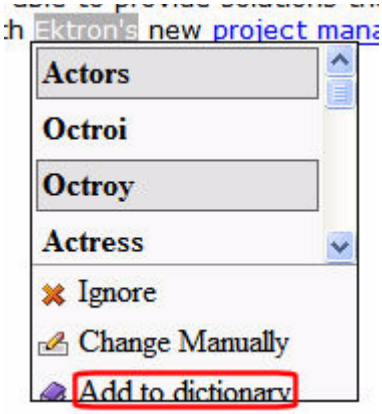
3. To the right of the language, click **Delete**.

Replacing a Dictionary

You would typically want to replace a standard dictionary if you have a word list that you consider superior to the one provided. The procedure for replacing a dictionary is documented in "Importing a Dictionary" on page 925.

Editing eWebEdit400's Custom Dictionary

A language's custom dictionary is created the first time a user uses the **Add to Dictionary** option while spell checking content in that language.



From then on, the dictionary is updated when anyone using that server edits content in that language and uses the **Add to Dictionary** option.

How the Custom Dictionary is Named

The name of the custom dictionary is formed by stringing together

- the language code of the content
- a dash (-)
- the word **custom**
- the file extension .txt

So, if the content is French, the file's name is fr-fr-custom.txt. The file is saved to the `root/Workarea/Foundation/RadControls/Spell/TDF` folder.

Editing the Custom Dictionary

Edit the custom dictionary using any application that updates .txt files, such as Notepad.

Character Encoding

The following Ektron Knowledge Base articles describe issues surrounding the display of special characters within **Ektron**

CMS400.NET. Note that these articles refer to eWebEditPro, Ektron's WYSIWYG editor embedded within **Ektron CMS400.NET**.

Wherever these articles contain references to eWebEditPro's configuration data or file (config.xml), you should instead update the web.config file, located in your site's root folder.

- HOWTO: produce UTF-8 (www.ektron.com/developers/ewebeditpro_tutorials.cfm?id=403)
- INFO: Character Encoding (www.ektron.com/developers/ewebeditprokb.cfm?id=1807)
- INFO: Encoding special characters (www.ektron.com/developers/ewebeditprokb.cfm?id=384)

Translating the Workarea

When **Ektron CMS400.NET** is delivered, the Workarea is in English. If you want to translate it to another language, read this section.

NOTE Ektron provides American English strings in a text file. You must translate them.

Prerequisites

- The alphabetical, four-character identifier of the country/language into which you are translating. See CultureInfo Class from the MSDN Web site (`http://msdn2.microsoft.com/en-us/library/system.globalization.cultureinfo(vs.71).aspx`).
- The server that hosts **Ektron CMS400.NET** must have Visual Studio.NET

Procedure for Translating Workarea Strings

All Workarea text (that is, screen titles, Workarea menus, messages, alt text for buttons, etc.) is stored in a *resource file*. Resource files are installed to the `siteroot\Workarea\resources` directory.

NOTE Workarea images that include text are stored in the `workarea/images/`*`language`* folder. For example, `Workarea\images\french_standard`.

Ektron CMS400.NET provides a resource files for the following languages. The English resource file is complete. The others are partially complete.

- German
- English (United States)
- Spanish
- French
- Italian
- Dutch - Netherlands
- Dutch - Belgium

Regardless of the list above, to translate your Workarea, translate the English file into the desired language.

Procedure Overview

A resource file is not human-readable. To make it so, use Microsoft's resgen utility. Next, translate the human-readable, .txt version of the file. Here is a portion of it.

```
add menu title=Add Menu
lbl ad serverip=Domain Controller IP
alt: remove collection items text=Click here to remove items from
this collection
```

Notice that, for each string in the file, an English description appears first. The description includes information about where the text appears. For example, `btn` text appears on a button. Next is an equal sign (=), then English text.

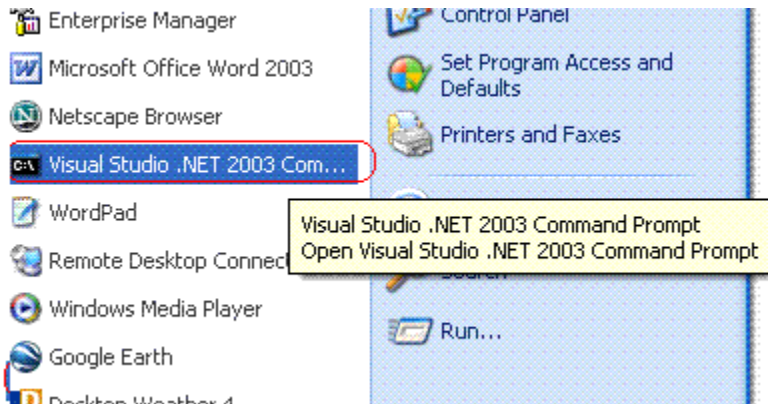
Translate the text to the right of the equal sign. You can send the file to an agency or do it yourself.

Then, run the resgen utility on the .txt file again, indicating the translate-to language. This converts the file back to a machine-readable format. Finally, move that file to the appropriate language folder under `workarea/images`, and enable the new language in the Workarea.

Step by Step Instructions

To perform this procedure, follow these steps.

1. The resgen.exe utility is located in `C:\Program Files\Microsoft Visual Studio 8\SDK\v2.0\Bin`. Copy it to the *your web site*`\Workarea\resources` folder.
2. Go to **Windows Start button > Microsoft Visual Studio 2005 > Visual Studio Tools > Visual Studio 2005 Command Prompt** to open a command window.



3. Within the command window, change the directory to the *your web site*`\Workarea\resources` folder. For example, `cd C:\Inetpub\wwwroot\CMS400Min\Workarea\resources`.
4. Insert the following text: `resgen EKResource.en-US.resources` *anyfilename*`.txt`

NOTE You can assign any name to the .txt file.

5. A .txt file of resource strings converted to a human-readable format is created in the `resources` directory. (You assigned its name in Step 4.) Open the file.
6. Replace any single backslash (\) with a double backslash (\\).
7. Translate the text following every equal sign (=). Be careful not to change any occurrences of n surrounded by double backslashes (`\\n\\`).

NOTE You can send the file to a translation house or translate the strings yourself.

8. Save and close the .txt file.

9. Open the command window (as described in Step 2) and insert the following: `resgen anyfilename.txt EKResource.two-character country code-two-character language code.resources`

   Replace `anyfilename.txt` with the file you named in Step 4. In this example, the .txt file is named span_translation.txt.

   For example, to indicate that the Workarea is being translated into the Spanish/Spain, enter `resgen.exe span_translation.txt EKResource.es-ES.resources.`

   When the conversion is complete, **Writing Resource File ...Done** appears in the command window.

10. The `Workarea\resources` folder includes several resource files. If one exists for the translate-to language, it is overwritten. If one does not exist, it is created.

    To follow our example, the `EkResource.es-ES.resources` file was updated with changes you made in Step 7.

11. Move the updated resource file to the appropriate language folder under Workarea/images. To continue our example, move the file to the `Workarea/images/spanish_traditional_Sort` folder.

    If a folder does not exist for the new language, create one under `Workarea/images`.

12. Enable the new language in the Language Settings screen. See "Determining Which Languages are Available" on page 880

13. Make the new language the default language in the Configuration Setup screen. See "Default Application Language" on page 24.

Managing Ektron CMS400.NET

Mapping Feature

The Mapping feature displays a map that flags locations of interest to your site visitors. Using Ektron's GeoMapping functionality, content can be tagged with longitude and latitude coordinates to leverage Microsoft® Virtual Earth™ and Google Maps.

Each location is a CMS content item to which map information was added. For example, if your site hosts a school district, each map location could represent one school in the district.

For information on installing and using the Mapping Feature, see the **Ektron CMS400.NET** Developer Manual section "Introduction to **Ektron CMS400.NET** Server Controls" > "Map Server Control."

Content Analytics Feature

The Content Analytics feature lets you track statistics about visits to your Web site. You can use it to determine the following kinds of information:

- how often your content was viewed
- how many site visitors viewed for first time, and how many returned
- the most popular *referral pages* (that is, the Web page from which visitors clicked to arrive on your site)

Several options for selecting a date range let you compare activity across different weeks, months, and years.

This section explains the Content Analytics feature through the following subtopics.

- ”Enabling the Content Analytics Feature” on page 934
- ”Determining Which Templates are Tracked” on page 935
- ”Specifying the Frequency of Writing to the Database” on page 937
- ”The Statistical Data” on page 937
- ”Writing to the IIS Log” on page 939
- ”Content Analytics Reporting” on page 939
- ”Changing the Date Range of the Statistical Data” on page 945

Enabling the Content Analytics Feature

By default, the Content Analytics feature is enabled in the web.config file, under the `<analyticsSettings>` tag. To disable it, set the value of the `enableAnalytics` property to `false`.

```
<analyticsSettings>
```

```
<!-- globally enables or disabled all visitor tracking -->

<add key="enableAnalytics" value="true" />
```

If this property is set to `true`, and you later change it to `false`, statistical data remains within **Ektron CMS400.NET**, but no additional data is collected.

Determining Which Templates are Tracked

Analytic data is tracked for every template that has a Content Analytics server control.

NOTE Ektron CMS400.NET can only track template views if the viewer's browser's cookies are enabled.

Inserting a Content Analytics Server Control

For details about dropping this server control onto a template, see the **Ektron CMS400.NET** Developer Manual section "Content Analytics Server Control."

> **Best Practice**
>
> Drop the control onto an area that does not disrupt the template layout, such as the bottom.

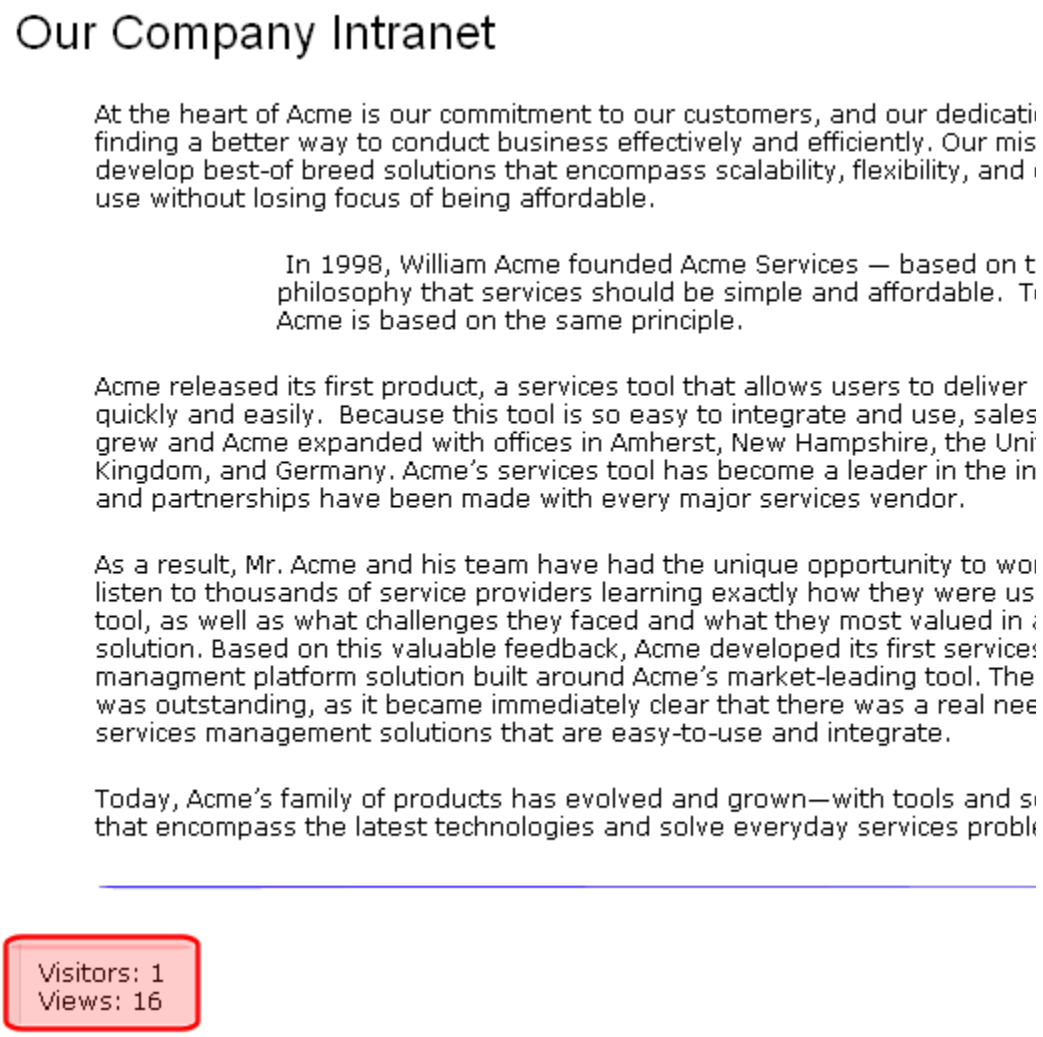
Tracking Templates vs. Individual Content Items

To track visitor activity to a template (for example, customerservice.aspx), drop the server control onto it. To track activity for a content item within that template, set the **DefaultContentID** property to the ID of that content.

NOTE You can only track one content item per template.

Display of Analytic Data on Template

If a user is logged in, each template that has a server control displays statistics for that template. So, you can immediately see how many times a template has been viewed, and by how many visitors (as illustrated below).


Our Company Intranet
At the heart of Acme is our commitment to our customers, and our dedicati
finding a better way to conduct business effectively and efficiently. Our mis
develop best-of breed solutions that encompass scalability, flexibility, and
use without losing focus of being affordable.
In 1998, William Acme founded Acme Services — based on t
philosophy that services should be simple and affordable. T
Acme is based on the same principle.
Acme released its first product, a services tool that allows users to deliver
quickly and easily. Because this tool is so easy to integrate and use, sales
grew and Acme expanded with offices in Amherst, New Hampshire, the Uni
Kingdom, and Germany. Acme's services tool has become a leader in the in
and partnerships have been made with every major services vendor.
As a result, Mr. Acme and his team have had the unique opportunity to wo
listen to thousands of service providers learning exactly how they were us
tool, as well as what challenges they faced and what they most valued in
solution. Based on this valuable feedback, Acme developed its first service
managment platform solution built around Acme's market-leading tool. The
was outstanding, as it became immediately clear that there was a real nee
services management solutions that are easy-to-use and integrate.
Today, Acme's family of products has evolved and grown—with tools and s
that encompass the latest technologies and solve everyday services probl
Visitors: 1
Views: 16

You can get a more detailed breakdown of activity for a template by viewing the Top Templates statistics. *See Also:* "Top Templates" on page 944

Specifying the Frequency of Writing to the Database

Once you set up the Content Analytics feature, your database is subject to a continuous barrage of write activity, generated by visits to your site.

To mitigate the effect of this activity on your database's performance, you can hold visit activity in application server memory until a predetermined amount of data is collected. When that amount is collected, it is moved in one packet to the database. So, the database is "hit" much less frequently.

You can specify the amount of data saved in memory prior to being written to the database using these web.config file elements.

- `recordsBeforeWrite` - the number of unique template visits
- `timeBeforeWrite` - the number of seconds since the last time a database write occurred

When either element reaches the value set in web.config, all records stored in application server memory are written to the database. That event also resets the value of both elements to zero (0).

The Statistical Data

For every template view, the following statistical information is captured:

- **url** - the visited page
- **content_id** - the ID of the visited content. Only captured if a content block ID was entered in the server control's **DefaultContentID** property. *See Also:* "Tracking Templates vs. Individual Content Items" on page 935
- **visitor_id** - a unique GUID that identifies a visitor
- **hit_date** - date and time when a page view occurred
- **referring_url** - the URL a user was viewing before jumping to the visited page

- **visit_type** - zero (0) indicates new visitor, 1 indicates returning visitor, 2 indicates all other views. *See Also:* "Tracking Site Visitors" on page 938

  In a session, the first page hit tracks the visit as zero (0) (if the user is new) or 1 (if the user previously visited the page). From then on, 2 is logged.

Tracking Site Visitors

The Content Analytics feature provides information about visits made by *new* versus *returning* visitors. To capture this data, the feature asks this question whenever a page is visited: is the user logged in as either a membership or regular user?

- If *yes*, capture the user ID with the statistical data
- If *no*, place a cookie on the visitor's computer

So, the first time a user visits a page, either user information is captured or a cookie is created.

The next time the user visits that page, the feature checks the visit history for the user ID, or for a cookie. If either is found, the visit is considered a return.

New Visitor Statistical Tracking

The same user visit may be considered new on one view but not on another. For example, someone visits on January 30 (Monday) then again February 2 (Thursday). On the monthly statistics, that visitor is new, but on the weekly statistics, the February 2 hit would be a return visit (his second this week).

Now consider a second visitor, who browses to your site on the first and 20th of the month. These visits would appear on weekly statistics as two new visits, but on the monthly statistics, only the first visit would show up on that month's tally of new visitors. The second visit would add to the return visitor statistics.

Writing to the IIS Log

In addition to writing Site Analytic data to the database, you can write it to the IIS log. To do this, enable the `appendToIISLog` element in the web.config file.

Note that if you set `appendToIISLog` to `true`, Site Analytic data is written to the IIS log, but does not appear in the Workarea. Only data written to the database appears in the Workarea.

Content Analytics Reporting

The Content Analytics feature has extensive reporting features which are based on drilling down from a top-level view of the entire site, to individual templates, all the way down to individual content items (if specified).

To access Content Analytics Reports, follow these steps.

Either

1. Browse to a content item for which analytic data is being captured.
2. Right click the mouse.
3. Click **View Template Activity** to see analytic data for the current content item (to learn more about data captured for one content item, see ”Top Content” on page 943).
4. Click **View Site Analytics** to view analytic data for the entire Web site.

or

1. Go to **Modules** > **Site Analytics** to view analytic data for the entire Web site.

Five levels of reporting are available.

- ”Site Statistics” on page 940
- ”Site Activity” on page 941
- ”Top Content” on page 943
- ”Top Templates” on page 944
- ”Top Referrers” on page 945

Summary of Statistical Data Available

The following table lists the kinds of analytic statistics that can be viewed at each level of the site.

Type of Statistical Information	Site-wide	Template-Level	Content-Level
Views of Any Template	X	X	X
Visitors: New and Return	X	X	X
Pie Chart of New vs. Return Visitors	X	X	X
Pie Chart of Views/Visitors Ratio	X	X	X
Bar Graph of Views/Visitors Ratio	X	X	X
Visited Pages	X		
Visited Content Blocks	X	X	
URLs from which Site Visitors Accessed **Ektron CMS400.NET**	X		

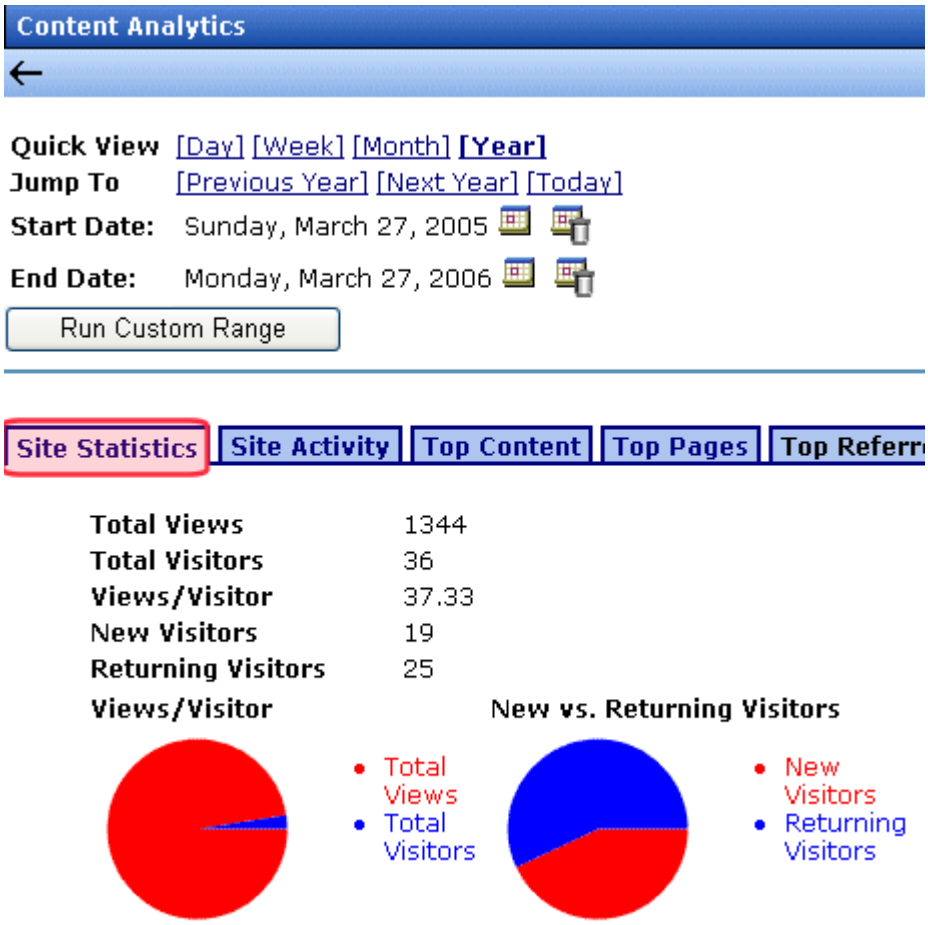
Site Statistics

The Site Statistics screen offers an overview of all tracked activity within the selected date range. You see actual data for the

- number of views
- number of visitors
- ratio of visitors per view
- number of new and returning visitors
- ratio of new to return visitors

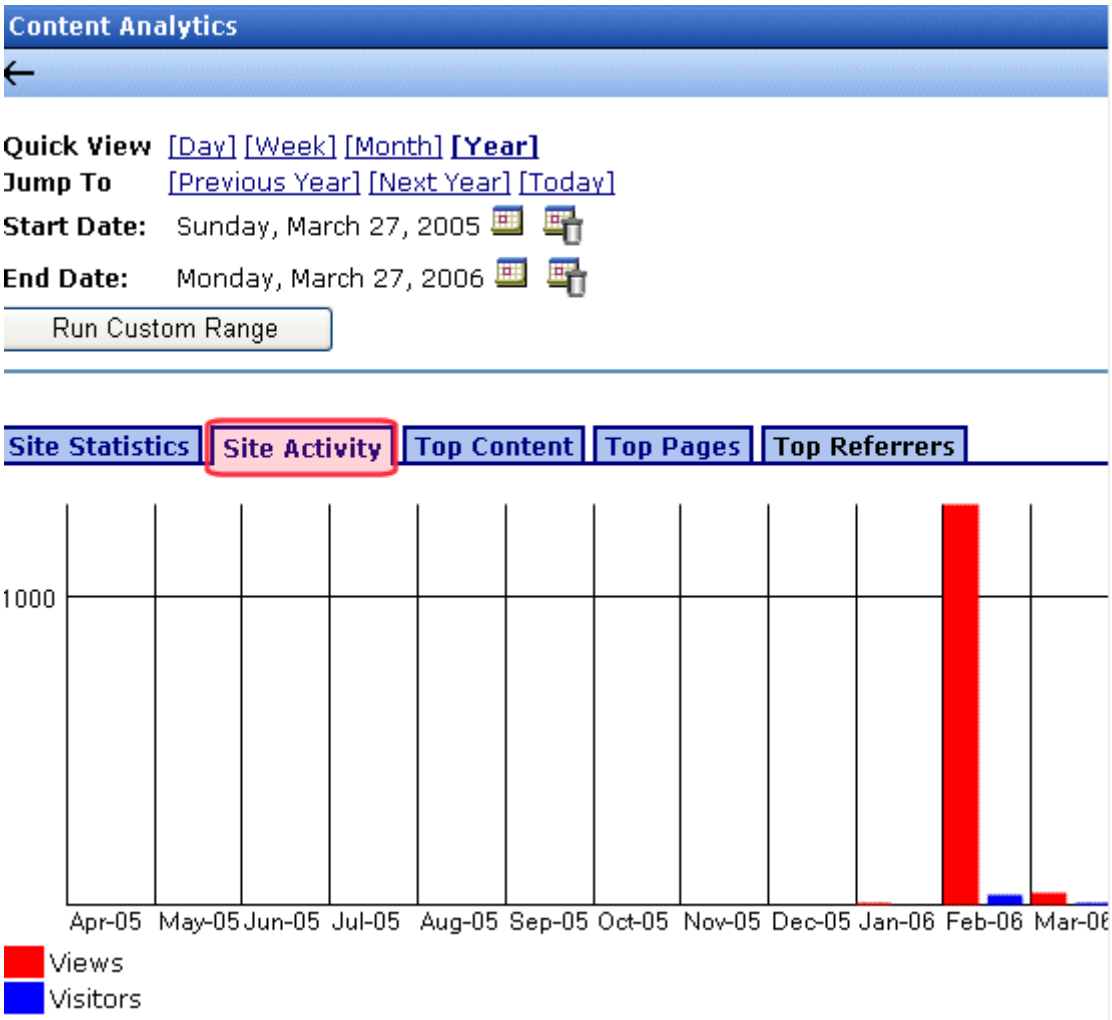
Below this data are pie charts of the ratio of views to visitors and new vs. return visitors.

NOTE To understand how new and returning visitors are tracked, see "Tracking Site Visitors" on page 938.



Site Activity

The Site Activity view shows relative activity during the selected time period. The red bar indicates views, and the blue bar indicates visitors.



Site Activity Time Increments

The graph's time increments are one level below the **Quick View** selection. For example, in the screen above, **Quick View** is set to **Day**. So, the statistics are broken down by *hours* of the day.

The following table lists the Site Activity time increments for each Quick View selection.

Quick view time increment	Site Activity Graph display broken down by these units
day	hourly
week	daily
month	weekly
year	monthly

Top Content

The Top Content View shows the most frequently-accessed content items on your Web site.

See Also: "Tracking Templates vs. Individual Content Items" on page 935

You can click any content item to view

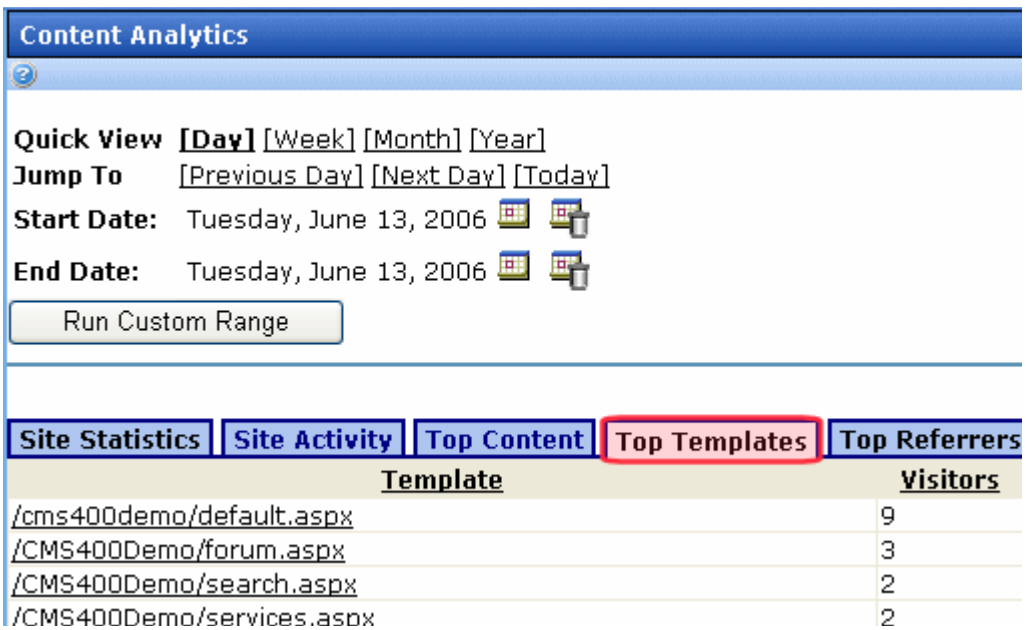
- **Content Statistics** - statistics for that content item only (*See Also:* "Site Statistics" on page 940)
- **Content Activity** - relative activity for that content item only (*See Also:* "Site Activity" on page 941)
- **Audit Content** - all users who viewed the selected content item; to the right of each user are the date and time when the content was viewed

NOTE Only users who viewed the content after logging in appear on the list. Visitors to your site who do not log in affect statistics but are not tracked on this report.

Top Templates

The Top Templates View shows all viewed templates on your Web site, with the most frequently-accessed templates on top.

By default, the templates at the top of the list are those with the highest number of unique visitors. You can change the sort by clicking on any column header. For example, to sort the templates by the number of views, click **Views**.

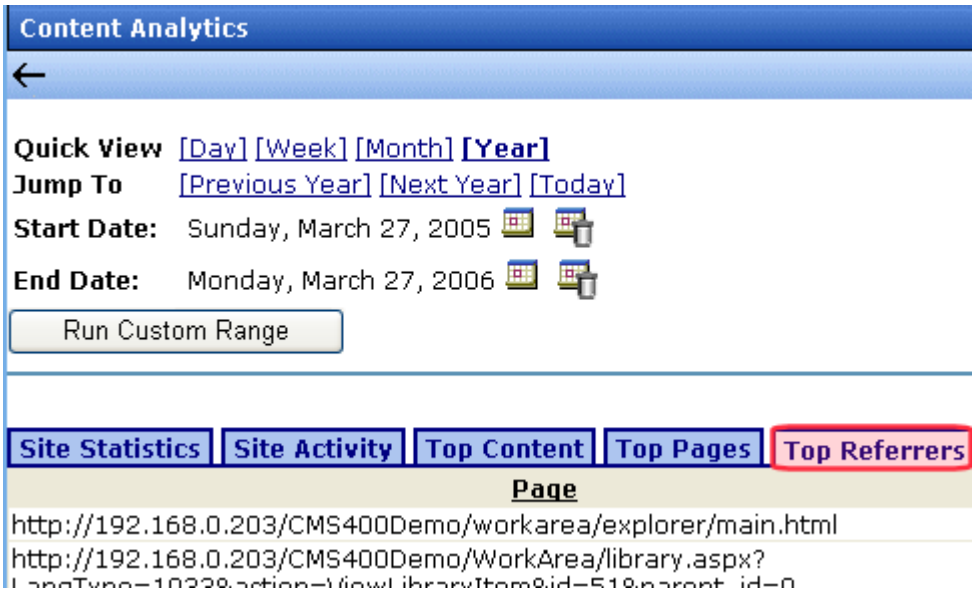


You can click any template to view

- **Template Statistics** - statistics for that template only (*See Also:* "Site Statistics" on page 940)
- **Template Activity** - relative activity for that template only (*See Also:* "Site Activity" on page 941)
- **Content in Template** - if a content items was specified for the template in the Content Analytic server control, this view show statistics for the template. You can click the template to view Template Level activity. (*See Also:* "Top Templates" on page 944)

Top Referrers

The Top Referrers View shows the Web pages from which your site was most frequently accessed.



Changing the Date Range of the Statistical Data

When you first view statistical data, the default date range is today (one day).

If you view statistics for different date ranges, when you return to the screen, the last selected date range is the default selection. You can change it if needed.

Using Quick View Options

Use **Quick View** options to view analytic statistics for any of the following time periods.

- one day
- one week
- one month
- one year

When you click **Quick View [week]**, **[month]** or **[year]**, the current end date is used as the *last* day of the range. Here are some examples.

Quick View Option	If end date is today, begin date is
Week	one week earlier than today
Month	one month earlier than today
Year	one year earlier than today

Using Jump To Options

Use **Jump To** options to view analytic statistics for a time period before and after the current date range. The time period is determined by the Quick View increment. For example, if the Quick View option is Day, you can *jump to* the previous day, the following day, or today.

Regardless of the Quick View increment, you can always view statistics for today.

Quick View Option	"Jump to" options
Day	• previous day • next day • today
Week	• previous week • next week • today
Month	• previous month • next month • today
Year	• previous year • next year • today

Community Management

A community is a group of people who network with each other to share information, ideas, likes and dislikes. Typically, people or members in the community are connected by a relationship. For example, they work for the same company, went to the same school, share the same values, or have a friendship.

When a person visits a community site, he can look around to see what type of information, people and groups are on the site. While the person can see limited information on the site, he needs to become a member of the site to see all information.

When a person signs up to be member, he defines information about himself. This is known as his member profile. Once a person becomes a member, he can

- search for other members and add them to his friends list
- invite non-members to join the community and become a friend
- join or create a community group
- add photos
- add documents
- leave messages on another member’s message board
- write a private message to another member
- keep a journal of his thoughts
- have a list of favorite CMS400.NET content links
- have a list of content he’s added
- write content reviews
- flag content

The Community Platform in CMS400.NET is a group of features that allow users to network socially on the site. Access to the community platform is available from the Web site or the Workarea. Only CMS400.NET users and administrators can

access their information via the Workarea. Membership Users, CMS400.NET users, and administrators can access their profile pages via a Web site.

As an Administrator, you can manage Community features from the Workarea. These features are described in the following topics:

- ”Accessing a Profile” on page 949
- ”Message Board Comments Associated with Content in the Workarea” on page 950
- ”Community Groups” on page 950
- ”Distributing Content to Another Ektron CMS400.NET Folder” on page 960
- ”Flagging” on page 972
- ”Email Invites For Community Management” on page 987
- ”Tags” on page 989
- Reviews - see ”Content Rating” on page 91
- ”Assigning Templates to Groups and Members” on page 1002

Accessing a Profile

A Profile provides users with information about a user. Administrators can access user profiles from the Workarea. CMS400.NET users can access their profile from the Workarea or the Web site. Membership users can access their profile page from the Web site.

IMPORTANT! For CMS400.NET users, some profile information in the Workarea’s **View User Information** screen is not available on the Web site profile page. That information involves Workarea settings.

Profiles in the Workarea

In the Workarea, profiles are located in the following areas:

- For CMS400.NET Users - navigate to **Settings** > **Users**. See ”Managing Users” on page 721
- For Membership Users - navigate to **Modules** > **Community Management** > **Memberships** > **Users**. See the ”Working with Membership Users” on page 737

Message Board Comments Associated with Content in the Workarea

Message Board comments can be associated with content. This allows a user who views the content on the site to add comments about the content.

NOTE Message Boards can also be associated with users and groups. See the User Manual section My Workspace > Message Board and the Developer Manual section “MessageBoard Server Control.”

IMPORTANT! Message Board comments are not the same as the Comments tab on the View Content screen. *See Also:* The User Manual section “Working with Folders and Content” > “Adding Content” > “Tabs on the Edit Content Screen”

You can view these comments in the Workarea. To do so, follow these steps:

1. Click the **Content** folder button.
2. Navigate to the content block for which to view messages.
3. Click that content item. The View Content screen appears.
4. Click the View Content Reports button ( ).
5. Click the **Messages** tab.
6. A list of comments associated with the content appears.

Community Groups

IMPORTANT! Membership User Groups and Community Groups are two different concepts. Membership User Groups allow an administrator to create a group of membership users, thereby reducing the effort required to assign identical permissions to many users. See ”Membership User Groups” on page 746. Community Groups are explained below.

Community Groups are another aspect of a community sites. Being a part of a group allows you to meet people with a similar interest; for example, car racing.

Groups have features and functions similar to users. A Community Group can have its own Message Board, Discussion Board, show a list of members in the group, and keep a journal about the group. Community Groups can be managed from the Web site or the Workarea.

Community Groups can also be assigned to a Taxonomy. This allows users to browse and search for groups by category.

You can also assign Tags to a community group. This allows users to find the group when searching via tag name. Tag information for a group appears in the Group's profile on the Web site. In the Workarea, Tag information can be found on the View Community Group's > Tag tab. From this tab, you can add a Default Group Tag or a new tag associated with the group.

See Also:

- "Community Groups in the Workarea" on page 951
- "Managing Community Groups" on page 951
- "Distributing Content to Another Ektron CMS400.NET Folder" on page 960

Community Groups in the Workarea

You can access community group information in the following areas of the Workarea:

- **My Workspace > Community Groups** - this area allows you to see what groups you belong to and remove yourself from them. See the User Manual section "My Workspace" > "Community Groups" for additional information.
- **Modules > Community Management > Community Groups** - this area allows you to see all groups that exist. You can define a group's details or add and remove members from the group when you are:

  - a Group's Leader (Group's Administrator)
  - a CMS400.NET Administrator
  - a CMS400.NET user or Membership user with the Community Group Admin or Community Group Create role

Managing Community Groups

To view a list of all community groups in the Workarea, click the **Modules** folder > **Community Management** > **Community Groups** > **Groups**.

From this screen, the following actions and information are available.

- **Information**
  - Group Name
  - How many members are in the group
  - The language of the group
  - The ID of the group
  - Whether the group is Public or Restricted
  - The short description of the group
  - The location of the group
- **Actions**
  - ”Adding a New Community Group” on page 952
  - ”Viewing a Community Group’s Details” on page 954
  - ”Editing a Community Group’s Information” on page 955
  - ”Assigning Tags to a Community Group” on page 955
  - ”Viewing Members of a Community Group” on page 956
  - ”Adding Members to a Community Group” on page 957
  - ”Accepting/Declining Requests to Join a Community Group” on page 958
  - ”Removing Members from a Community Group” on page 958
  - ”Deleting a Community Group” on page 959
  - ”Searching for a Community Group” on page 959

Adding a New Community Group

Administrators or CMS400.NET users with the Community Group Administrator role can add a new community group in the Workarea. After you create a group, you can add members to it.
See Also: ”Adding Members to a Community Group” on page 957
To add a new community group, follow these steps:

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click the Add New Community Group button ( ).
3. The Add Community Group screen appears.

4. Use the table below to assist you with filling out this screen.

Field	Description
Properties Tab	
Group Name	The name of the group.
Administrator	A group administrator has privileges to delete a group or edit its properties. Note: Members of the Administrators group and users assigned to the Community Group Admin role also have these privileges. By default, the person who created the group is the group administrator. Click the **Browse** button if you want to select a different group administrator.
Membership	Select whether the group is open to the public, or if members can only join when invited.
Image	Upload an image to use as an avatar for the group.
Location	The geographical location associated with the group.
Short Description	A brief description of the group.
Description	A fully detailed description of the group.
Enable Distribute	Check this box if you want the group and system administrator to be able to *distribute* content to any **Ektron CMS400.NET** folder. *See Also:* "Distributing Content to Another Ektron CMS400.NET Folder" on page 960
Allow member to manage photo/ workspace folders	Checking this box allows members to add, remove and control the sharing of folders in a community group's Photo Gallery or Document's Workspace. *See Also:* "Allowing Community Group members to Work with Folders" on page 954.
Tags Tab	
Group Tags	From this screen, you can either create a new tag or select from a default list of community group tags. *See Also:* "Assigning Tags to a Community Group" on page 955.

Field	Description
Categories Tab	
Category List	The categories tab lists all of the categories associated with the community group. **Note:** If you have not defined at least one taxonomy for community groups, this tab does not appear. *See Also:* "Creating a Taxonomy" on page 646.

5. Click the Save button ( ).
6. The page refreshes, and the **View All Community Groups** screen appears.

Allowing Community Group members to Work with Folders

When you associate the CommunityDocuments or PhotoGallery server control with a community group, you can allow members of the group to add, remove and control the sharing of folders in these controls. To allow a member to work with Photo Gallery and Workspace folders, follow these steps.

1. In the Workarea, navigate to **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click a community group.
3. Click the **Edit** button ( ).
4. Place a check mark in the **Allow member to manage photo/ workspace folders** check box.
5. Click the **Save** button ( ).

Viewing a Community Group's Details

Any user with access to the Workarea can view a group's details. However, they cannot see the members of the group.

If a user is the Group Leader (Group's Administrator), an Administrator, or CMS400.NET User with the Community Group Administrator role, he can edit the group's information, add and remove members, or delete the group.

To view a group's details, follow these steps.

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. The group's detailed information appears.

Editing a Community Group's Information

Editing a group's information allows you change certain details about the group. Only the Group Leader (Group's Administrator), Administrators, CMS400.NET Users with the Community Group Admin, or Community Group Create role can edit a group's information.

To edit a group's details, follow these steps:

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the Edit button ( ).
4. Change any fields as needed. These fields are described in "Adding a New Community Group" on page 952.
5. Click the Save button ( ).

Assigning Tags to a Community Group

You can either create a new tag for a community group or select from a default list of group tags.

See Also: "Tags" on page 989

Creating New Tags for a Community Group

To create a new tag for a community group, follow these steps.

1. In the Workarea, navigate to the **Modules** > **Community Group** > **Groups**.
2. Click the community group for which to create a new tag.
3. Click the Edit button ( ).

4. Click the **Tags** tab.
5. Click the **Click To Add A New Group Tag** link.
6. Add a tag to the **Name** text box.
7. Select a Language.
8. Click **Save**.
9. Click the Save button ( ).

Once the Tag is saved, it appears in the Group Tags area with a check mark in the check box. Having a check mark in the check box means the tag is active for the community group.

Adding a Default Tag to a Community Group

To add a default tag to a community group, follow these steps.

1. In the Workarea, navigate to the **Modules** > **Community Group** > **Groups**.
2. Click the community group for which to create a new tag.
3. Click the Edit button ( ).
4. Click the **Tags** tab.
5. Place a check mark in the tag's check box that you want to use.
6. Click the Save button ( ).

Viewing Members of a Community Group

Only the Group Leader (Group's Administrator), Administrators or CMS400.NET Users with the Community Group Administrator role can view members of the group. In addition to viewing community group members, you can see add and remove members. You can also accept or decline members' requests to join the group if the group's membership is set to **Restricted**.

See Also:

- "Adding Members to a Community Group" on page 957
- "Removing Members from a Community Group" on page 958
- "Accepting/Declining Requests to Join a Community Group" on page 958

To view members of a community group, follow these steps:

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the View Community Group Members button ( ).
4. A list of group members appears.

Adding Members to a Community Group

Only the Group Leader (Group's Administrator), Administrators or CMS400.NET Users with the Community Group Administrator role can add members to a group.

To add members to a group, follow these steps:

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the View Community Group Members button ( ).
4. The View Community Group Members for the group screen appears.
5. Click the Add User(s) button ( ).
6. The Add Members screen appears.
7. Using the drop down box, select the type of name for which to search.
8. Enter a name in the text box.
9. Click the **Search** button.

TIP! If you leave the text box blank and click the **Search** button, all results for the name type are returned.

10. The results are returned.
11. Place a check mark in the box next to each member to add.
12. Click the Add button ( ).
13. The **View Community Group Members** screen appears with all members of the group.

Accepting/Declining Requests to Join a Community Group

If a group's membership is set to **Restricted** (on the Add or Edit Community Group screen), users must request to join the group. If membership is set to **Open**, on the other hand, users join a group immediately.

Use the **Pending** tab on the View Community Group Members to accept or decline a user's request to join a group. Only a Group Leader (Group's Administrator), Administrators, or **Ektron CMS400.NET** users with the Community Group Administrator role can accept new members to a group.

To accept or decline members' request to join a group, follow these steps.

1. From the **Ektron CMS400.NET** Workarea, go to **Modules > Community Management > Community Groups > Groups**.
2. Click the group for which you want to accept or decline requests to join.
3. Click the View Community Group Members button ( ).
4. Click the **Pending** tab.
5. Check the box next to each member whose request you want to approve or decline.
6. To approve the selected members' request to join, click the approve button ( ).

   To decline the request, click the decline button ( ).

Removing Members from a Community Group

Only the Group Leader (Group's Administrator), Administrators, or CMS400.NET Users with the Community Group Administrator role can remove members from a group.

To remove members from a group, follow these steps.

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.

2. Click the **Group Name** link.
3. Click the View Community Group Members button ( ).
4. The View Community Group Members for the group screen appears.
5. Place a check mark in the box next to members you want to remove.
6. Click the Remove button ( ).
7. A dialog box appears asking you to confirm you are removing the selected members.
8. Click **OK** to remove the members.
9. The page refreshes, and the selected members are removed.

Deleting a Community Group

Only the Group Leader (Group's Administrator), Administrators or CMS400.NET Users with the Community Group Administrator role can delete a group.

To remove a community group, follow these steps:

1. Click **Modules** > **Community Management** > **Community Groups** > **Groups**.
2. Click the **Group Name** link.
3. Click the Delete button ( ).
4. A dialog box appears asking you to confirm that the community group will be deleted.
5. Click **OK**.
6. The page refreshes and the **View All Community Groups** screen appear.

You could

Searching for a Community Group

You can search for a Community Group in the Workarea by using the **Search** box located at the top of the View All Community Groups page. To search for Community Groups, click **Modules** > **Community Management** > **Community Groups** > **Groups**.

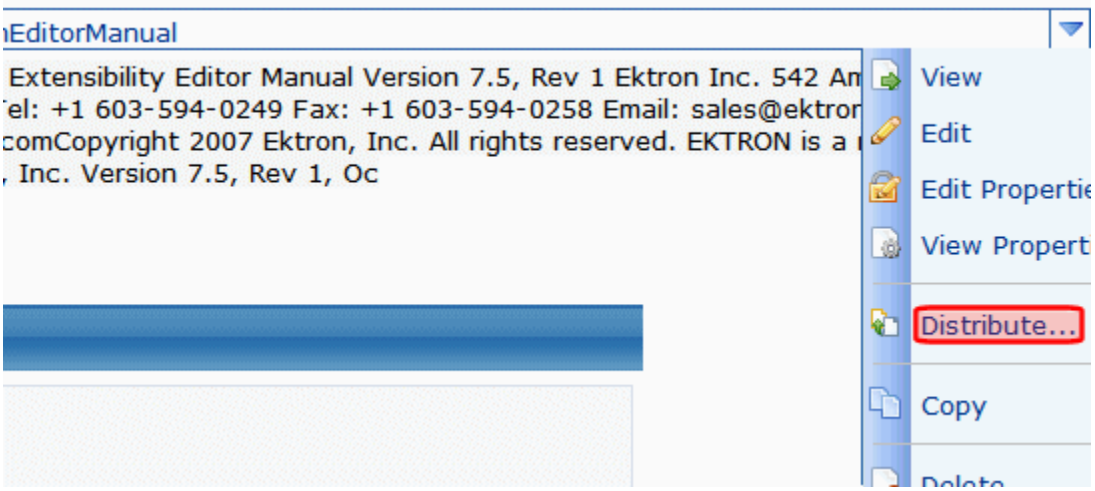
Enter text in the search box and click the **Search** button. A list of Community Groups that match the search term appears.

Distributing Content to Another Ektron CMS400.NET Folder

Ektron CMS400.NET supports the *distribution* of Community Documents to any CMS folder. (A community document is either HTML content or an asset created via the Community Documents server control.)

For example, your Marketing Department uses the Community Documents server control to create and edit content. After completing a press release, they use the **Distribute** menu option to copy it from the private collaboration folder to a public content folder. Once there, the document can pass through an approval chain or be published immediately.

The Distribute option can insert new content or overwrite existing content in any folder.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comCopyright 2007 Ektron, Inc. All rights reserved. EKTRON is a
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View Propert
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The Distribute Option is more fully explained through these topics.

- ”Enabling the Distribute Option” on page 961

- "Distributing a Community Document" on page 962

Enabling the Distribute Option

Only a member of the **Ektron CMS400.NET** Administrators group can enable the Distribute option. Do this for every Community Group that will use it. You can do so from the Workarea or after logging in to the Web site.

From the Workarea

1. From the **Ektron CMS400.NET** Workarea, go to **Modules > Community Management > Community Groups > Groups**.
2. Click the group for which you want to enable the Distribute option.
3. Click the **Edit** button ( ) .
4. Check the **Enable Distribute** check box.
5. Click the Save button ( ).

From the Web Site

1. Log into a site that uses the Community Management features as a CMS administrator or a Group Administrator.
2. Navigate to a Web page that hosts a Group Profile page.
3. Click the Edit Group link (circled below).

4. Check the **Enable Distribute** check box.
5. Click the Save button ( ).

Distributing a Community Document

There are two procedures for distributing a community document the first time. When doing so, ask yourself the following question.

What are you doing?	Read this procedures
Replacing an existing file in an **Ektron CMS400.NET** folder. The file types must match.	"Distributing a New Community Document that Overwrites an Existing One" on page 967
Placing a file in an **Ektron CMS400.NET** folder for the first time	"Distributing a New Community Document" on page 963

IMPORTANT! After a community document is distributed the first time, the original document is forever linked to the destination document. You cannot break the link.

If you want to later revise the document, you would typically edit it in the collaboration folder and select the Distribute option again. When you do, you are asked to confirm replacing the document in the destination folder. You are not allowed to select another folder.

If you really must distribute it to another folder, delete the document in the destination folder. This action breaks the link between documents. Once the link is broken, you can distribute the document to another folder.

"Distributing Content After the First Time" on page 971 explains how subsequent edits are handled.

Prerequisites

- You log in as one of the following
  - Administrator of the group whose documents are being distributed
  - Ektron CMS400.NET user assigned Community Group Administrator role for that group

- CMS administrator

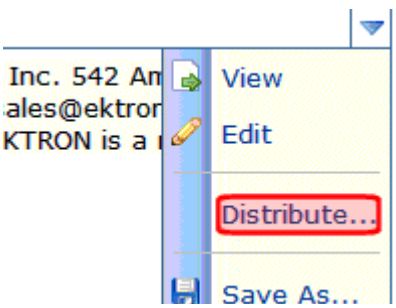
- The content's status is Approved.
- You have permission to add, delete, and restore content to the destination folder. (If you do not, the folder doesn't appear on the folder selection screen.) *See Also:* "Setting Permissions" on page 776

Distributing a New Community Document

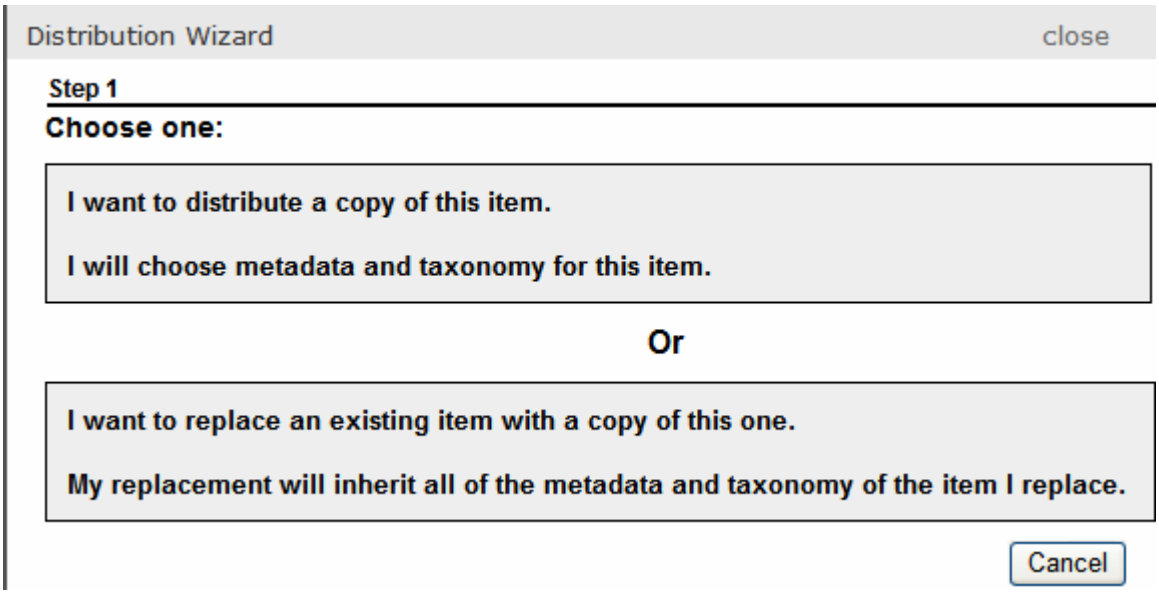
When distributing a Community Document that does not exist in **Ektron CMS400.NET** for the first time, you identify a destination folder and, if required, metadata and taxonomy categories. This information is collected through a series of screens that guide you through the process.

NOTE If you are using **Ektron CMS400.NET** with Microsoft Sharepoint Integration, after selecting the folder (in Step 8), the document is copied to that folder even if you later click the screen's **Close** button. *See Also:* "Ektron's Microsoft Office SharePoint Server Connector" on page 1083.

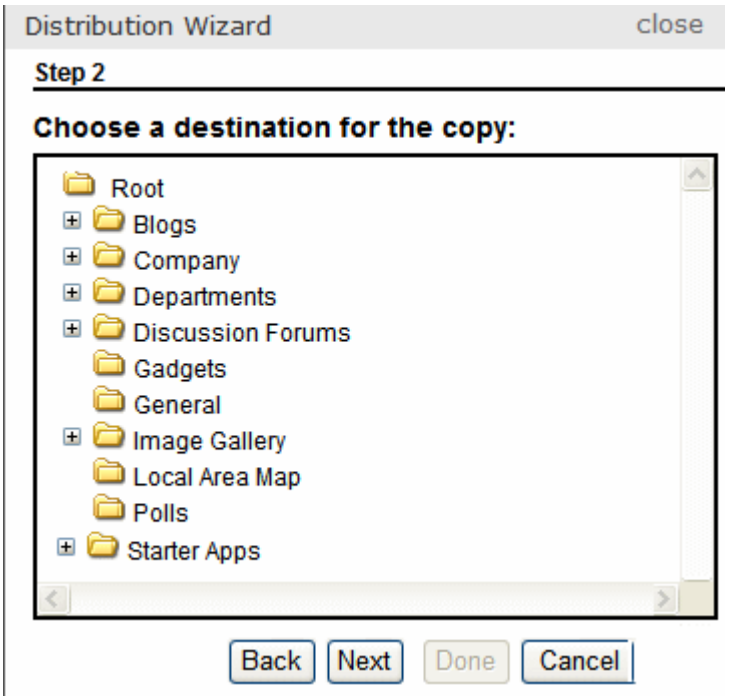
1. Log in to the Web site that contains content you want to distribute.
2. Navigate to the Web page that contains content you want to distribute.
3. Click the triangle to the right of the content or asset you want to distribute.
4. Click **Distribute** from the dropdown menu.



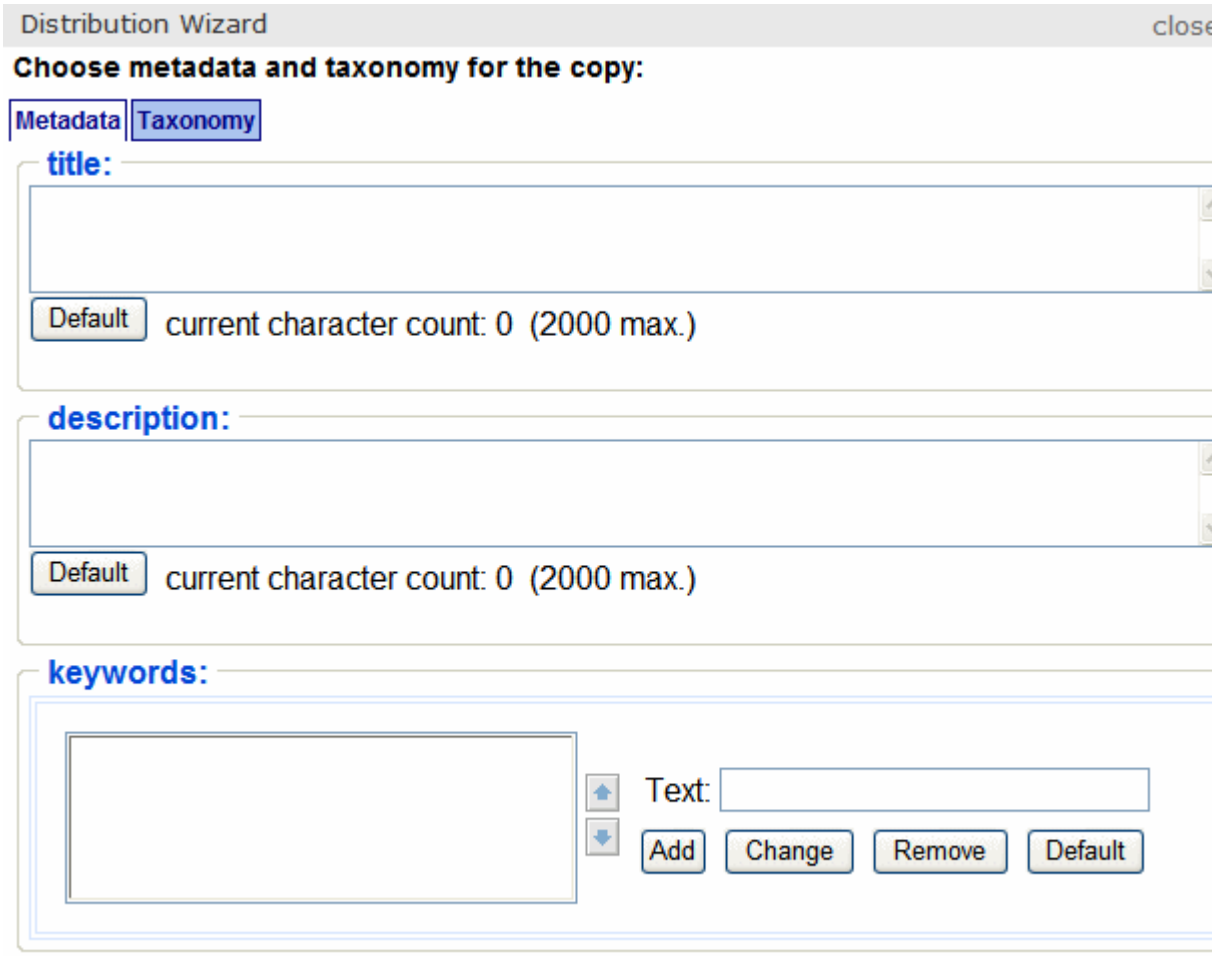
5. The following screen appears.


Distribution Wizard
close
Step 1
Choose one:
I want to distribute a copy of this item.
I will choose metadata and taxonomy for this item.
Or
I want to replace an existing item with a copy of this one.
My replacement will inherit all of the metadata and taxonomy of the item I replace.
Cancel

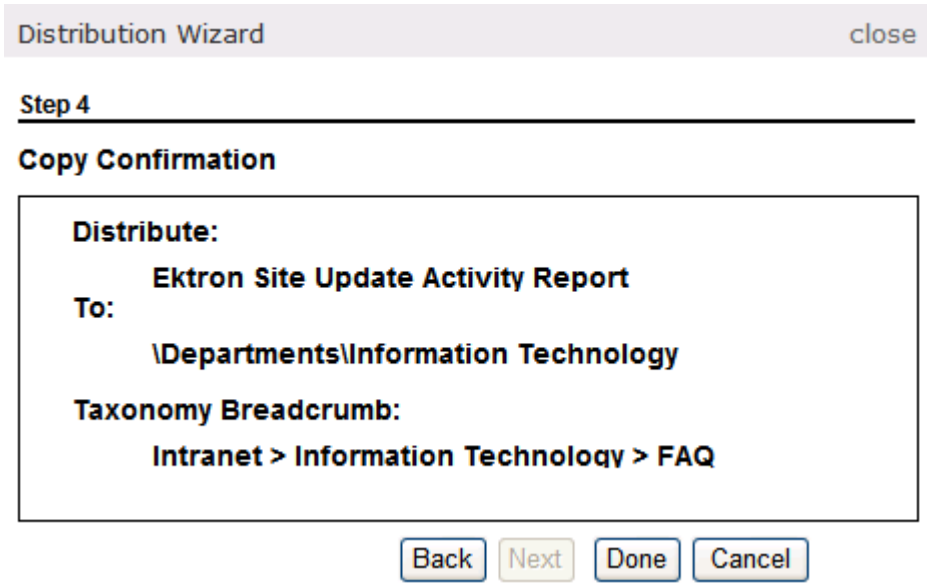
6. Click in the top box, which begins **I want to distribute a copy of this item**.
7. The following screen appears



8. Select the folder to which you want to distribute the content.
9. Click **Next**.
10. The following screen appears if metadata or a taxonomy category is required for the folder.



11. Enter any required metadata or taxonomy. See the **Ektron CMS400.NET** User Manual section “Adding or Editing Metadata,” ”Metadata” on page 118, and ”Taxonomy” on page 642.
12. A confirmation screen appears. Click **Done**.



13. **Ektron CMS400.NET** copies the selected document to the selected folder.

Distributing a New Community Document that Overwrites an Existing One

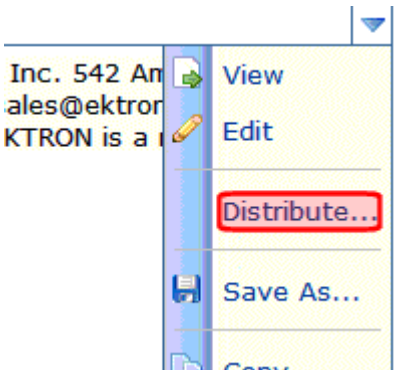
NOTE This process only occurs the first time you overwrite a document. For a description of subsequent updates, see "Distributing Content After the First Time" on page 971.

During this procedure, you identify a destination folder and content to be replaced. Since the content's type that you are distributing must match the content being replaced, you only see content whose types match.

Upon replacing, any metadata and taxonomy categories applied to the existing content are applied to the new. Also, the content title and ID number from the existing content are maintained -- they are not replaced by the title and ID number of the new content. Finally, the existing content's summary is maintained and can be edited if needed.

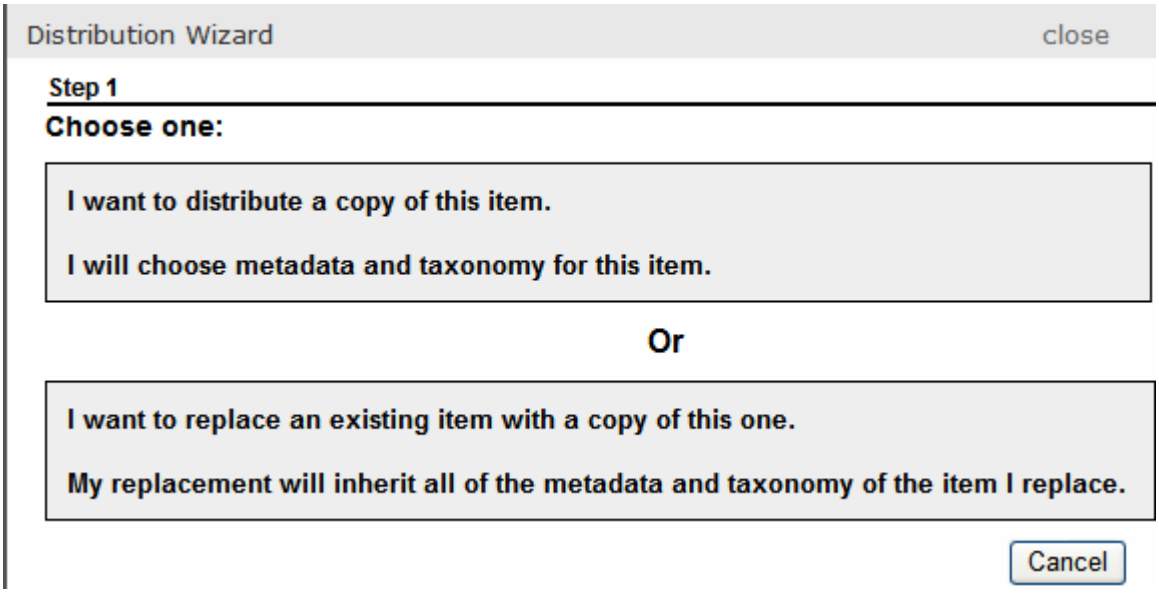
This information is collected through a series of screens that guide you through the process.

1. Log in to the Web site that contains the content you want to distribute.
2. Navigate to the page that contains that content.
3. Click the triangle to the right of the document you want to distribute.
4. **Distribute** appears on the dropdown menu.

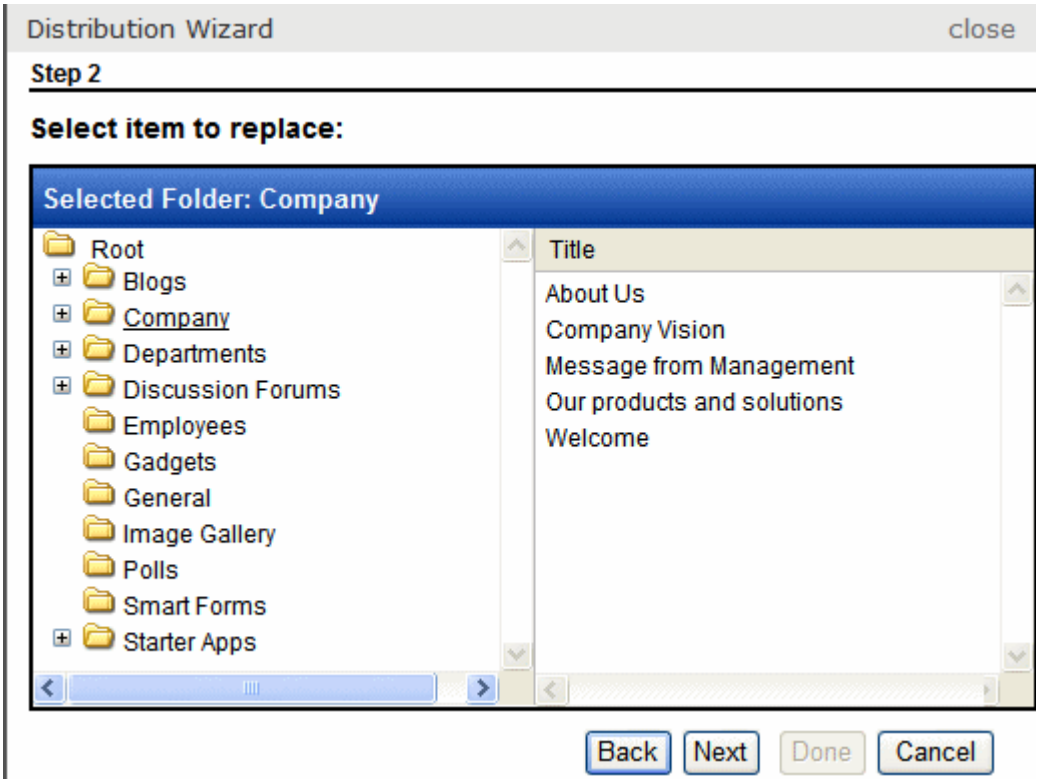


5. Click **Distribute**.
6. The following screen appears.

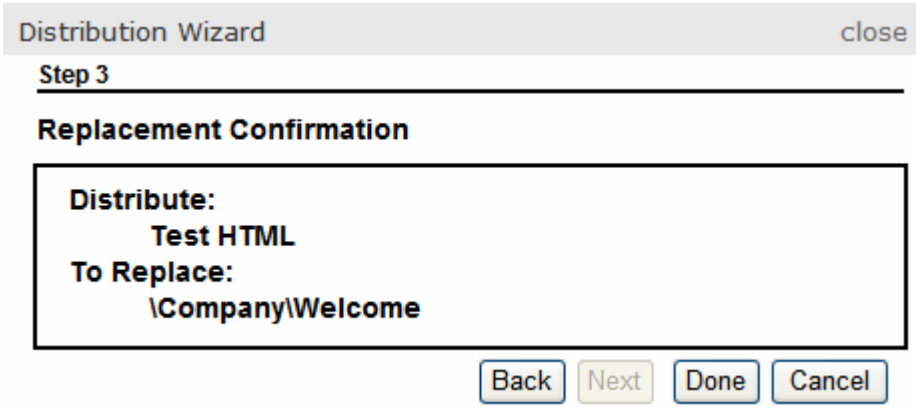
NOTE The following screen only appears the first time you overwrite a file. To overwrite the file subsequently, see "Distributing Content After the First Time" on page 971.


Distribution Wizard
close
Step 1
Choose one:
I want to distribute a copy of this item.
I will choose metadata and taxonomy for this item.
Or
I want to replace an existing item with a copy of this one.
My replacement will inherit all of the metadata and taxonomy of the item I replace.
Cancel

7. Click the lower box, which begins **I want to replace an existing item**.
8. The following screen appears.



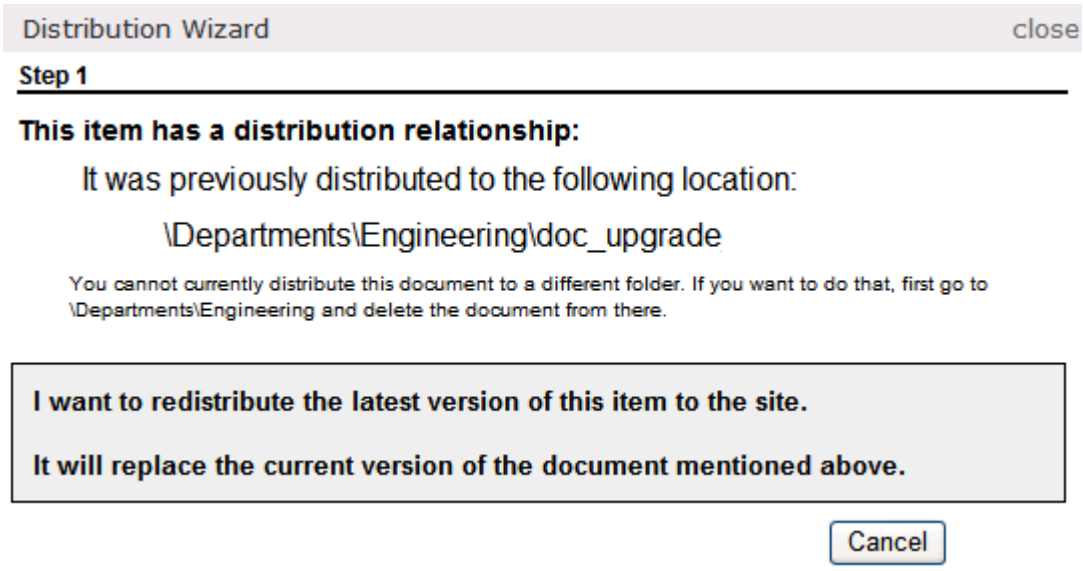
9. Navigate to and select the content you want to replace. Only content whose type matches the document you selected in Step 3 appears.
10. Press **Next**.
11. A confirmation screen appears. Click **Done**.



12. **Ektron CMS400.NET** overwrites the selected document with the one you selected in Step 3.

Distributing Content After the First Time

If you later try to **Distribute** the same document (whether you added a new document or overwrote an existing one), a screen like the following appears.


Distribution Wizard
close
Step 1
This item has a distribution relationship:
It was previously distributed to the following location:
\Departments\Engineering\doc_upgrade
You cannot currently distribute this document to a different folder. If you want to do that, first go to \Departments\Engineering and delete the document from there.
I want to redistribute the latest version of this item to the site.
It will replace the current version of the document mentioned above.
Cancel

You can copy the latest version of the document to the distribution folder by clicking in the gray box whose text begins **I want to redistribute...** However, you cannot distribute the document to another folder. (If you want to do so, first delete the document from the destination folder. Then, you can use either procedure to distribute the document to any folder.)

When distributing content after the first time, its metadata and taxonomy categories appear on the Metadata/Category screen by default. You can change them if desired.

As with the replace option, existing content's title and ID number are maintained -- they are not replaced by the new content's title and ID number. And, the existing content's summary is maintained and can be edited if needed.

Flagging

Flagging Content enables a site visitor who views a piece of content to flag content and provide feedback. It allows you to define a list of flags and apply the choices to a folder. Lists can be centered on content that is not appropriate for all viewers. For example:

- Sexually Explicit
- Mature (over 18 only) content
- Graphic Violence
- Hate Speech

While some sites use flagging to allow notification of inappropriate content, it can also be used to indicate if a content item is above average. This would help an organization to create a recommended content list. Below is an example list:

- Loved This Content
- Hated This Content
- I Could Take It or Leave It

After you create a flag definition and assign it to a folder, all content in that folder can be flagged. For a user to be able to flag content, a developer must add a ContentFlagging server control to a Web

page on the site and assign it the ID of the content to be flagged. See the Developer's Manual section "Introduction to Server Controls" > "ContentFlagging Server Control" for additional Information.

Having a way to flag content is a necessity for sites with a large quantity of site visitor-generated content. Content flagging can spread the moderation of your site to your site visitors Flagging can also help site visitors feel vested in the site.

Flagged content appears in the following Workarea locations.

- **Content Flags** list on the Smart Desktop
- **Modules** > **Community Management** > **Flagging** > **Flagged Content**
- a content item's **View Content Reports** > **Flagging** tab

This section contains the following topics.

- "Flagging Definitions" on page 973
- "Flagged Content" on page 977

Flagging Definitions

The Flagging Definitions screen is located in the Workarea > Modules > Community Management > Flagging. From this screen you can, view a list of existing flagging definitions, work with them, or create new definitions. In addition, the list of Flagging definitions can be filtered by language.

This screen contains the following information about a flagging definition.

Field	Description
ID	The ID of the flagging definition.
Name	The name of the flagging definition.
Description	A description of the flagging definition.

Field	Description
Language	An image of a national flag associated with the language. For example, American English appears as .
Items	The number of flags in a definition. For example, if you have a flag definition for these movie ratings: • G • PG • PG-13 • R The items count for this flag definition would be four.

This section contains the following topics.

- ”Adding a Flagging Definition” on page 974
- ”Edit a Flagging Definition” on page 975
- ”Deleting a Flagging Definition” on page 975
- ”Assigning a Flagging Definition to a Folder” on page 975
- ”Seeing Which Flagging Definition is Assigned to a Content Item” on page 977

Adding a Flagging Definition

To create a flagging definition, follow these steps.

1. In the **Workarea**, navigate to **Modules** > **Community Management** > **Flagging** > **Flagging Definitions**.
2. Select a language with which the flagging definition will be associated.
3. Click the Add button ( ).
4. The **Add Flagging Definition** screen appears.
5. Enter a **Name** and **Description** for the flagging definition.
6. Click the Option button ( ) to add a flag to this flagging definition.
7. Continue to click the **Option** button to add additional flags.

8. If necessary, change the order of the flags by clicking the Sorting buttons ( ). If you create a flag you want to remove, click the Remove button ( ).
9. Click the Save button ( ).

Edit a Flagging Definition

To edit a flagging definition, follow these steps.

1. In the **Workarea**, navigate to **Modules** > **Community Management** > **Flagging** > **Flagging Definition**.
2. Click the flagging definition **Name** link or the **ID** link.
3. Edit the available fields.
4. Click the Save button ( ).

Deleting a Flagging Definition

When you no longer want to use a flagging definition, delete it. When a flagging definition is deleted, it is removed from all folders with which it is associated.

To delete a flagging definition, follow these steps.

1. In the **Workarea**, navigate to **Modules** > **Community Management** > **Flagging** > **Flagging Definition**.
2. Click the flagging definition **Name** link or the **ID** link.
3. Click the Delete button ( ).

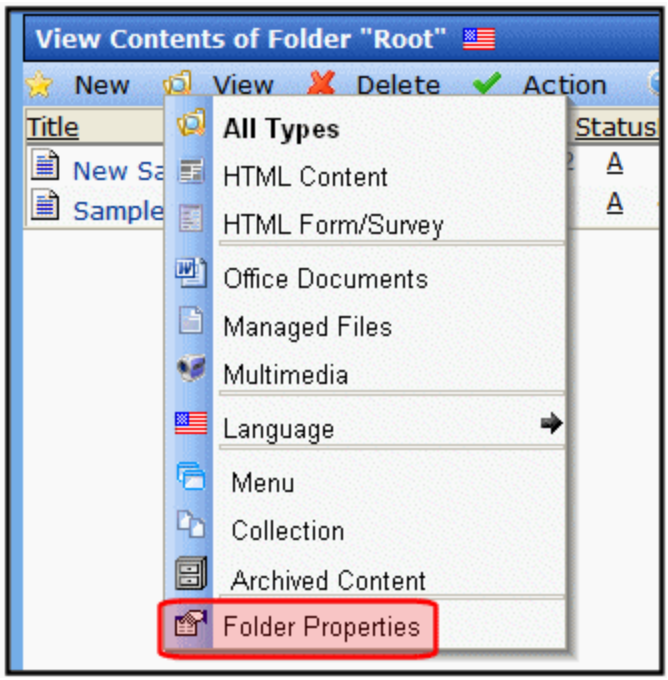
Assigning a Flagging Definition to a Folder

Once you have created a flagging definition, you can assign it to one or more folders. All content in the folders will have the selected flagging definitions applied to it.

To assign a flagging definition to a folder, follow these steps.

1. Create a flagging definition, as explained in ”Adding a Flagging Definition” on page 974.
2. Click the **Content** folder bar.

3. Navigate to the folder where the content to be flagged is located.
4. Select **View** > **Folder Properties** from the View menu.



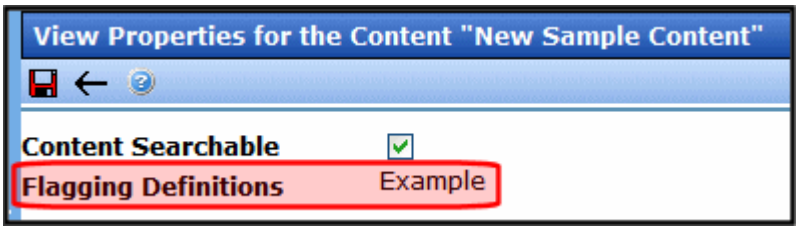
5. The **View Properties** screen appears.
6. Click the Edit button ( ).
7. Find the **Flagging** area.

8. Make sure the **Inherit Parent Flagging Configuration** check box is not checked.
9. Select an available flagging definition from the **Flagging** drop down.
10. Click the Save button ( ).

Seeing Which Flagging Definition is Assigned to a Content Item

To see which flagging definition is assigned to a content item, follow these steps.

1. In the **Workarea**, navigate to the content item.
2. Click the content's title.
3. Click the Edit Properties button ( ).
4. The **View Properties** screen appears.
5. The name of the flagging definition appears next to the **Flagging Definitions** title.



Flagged Content

The Flagged Content areas of the Workarea allow you to view and manage content that's been flagged and the flags themselves. There are three places in the Workarea to work with flagged content:

- on the **Smart Desktop**. This area deals with the most recent content flags associated with any content. See "Content Flags on the Smart Desktop" on page 978
- in **Modules** > **Community Management** > **Flagging** > **Flagged Content**. This screen is for all flagged content. See "Flagged Content in Modules > Community Management" on page 979.

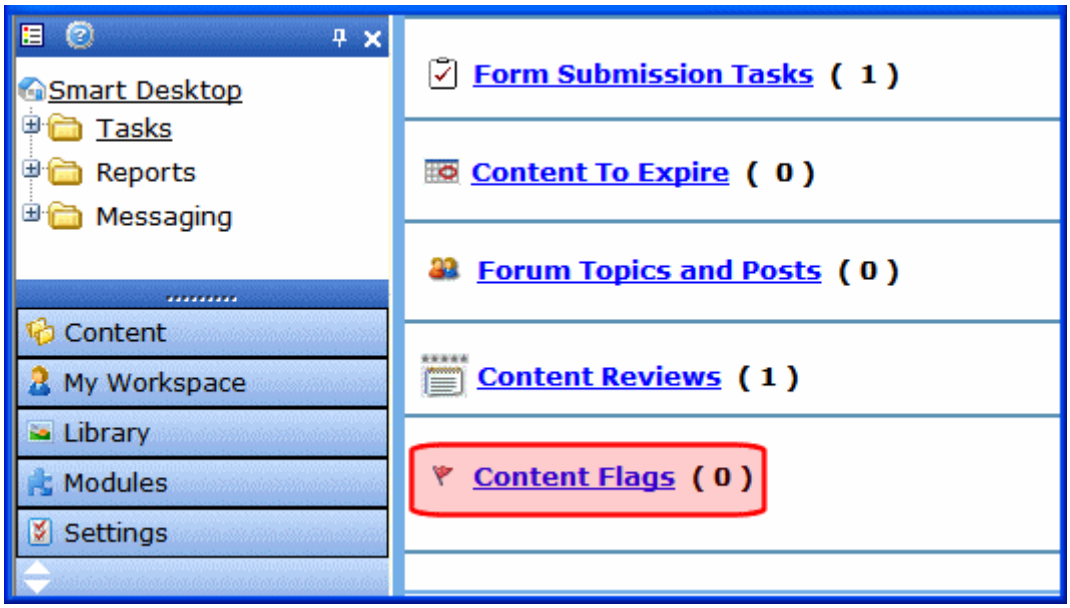
- a tab on the **Content Reports** screen for a content item. This tab displays a list of content flags for a specific content item - See ”Viewing a Content Item’s Flags” on page 984.

Flagged content is more fully explained through the following topics.

- ”Content Flags on the Smart Desktop” on page 978
- ”Flagged Content in Modules > Community Management” on page 979
- ”Viewing a Content Item’s Flags” on page 984
- ”Viewing a Flag’s Details” on page 985
- ”Editing a Flag’s Details” on page 986
- ”Deleting a Flag” on page 987

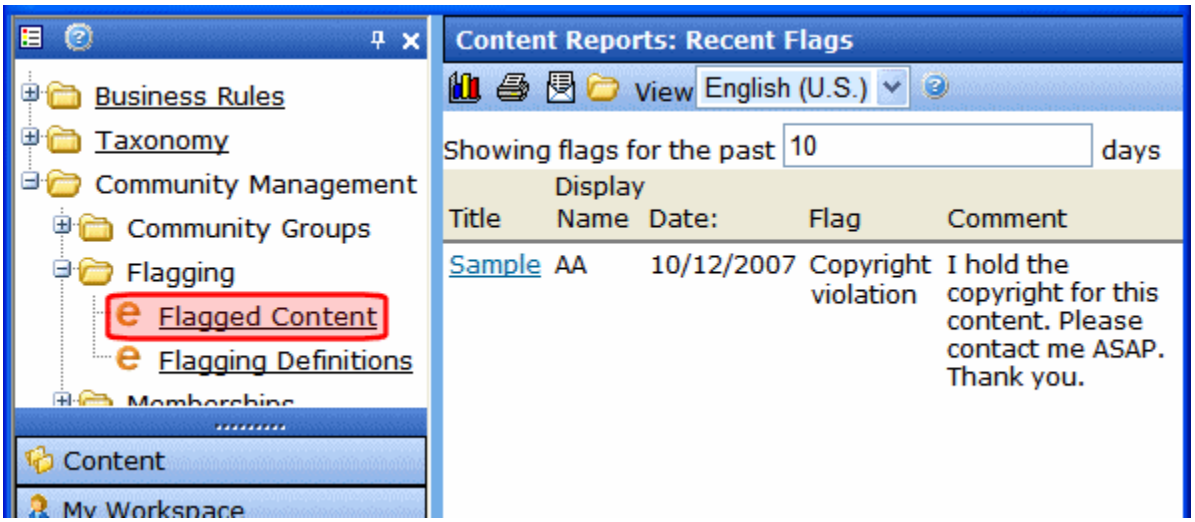
Content Flags on the Smart Desktop

This area lists the ten most recent content flags that have been added. From this area, you can view a flag by clicking on its Title link. To view all recent flags, click the **View recent flags** link. Clicking this link takes you to the Content Reports: Recent Flags screen. *See Also:* ”Flagged Content in Modules > Community Management” on page 979



Flagged Content in Modules > Community Management

The Flagged Content area in **Modules > Community Management > Flagged Content** allows you to display a list of flags. By default, the list shows flags for the last ten days. You can change this by entering a new number in the **Show flags for the last # days field**.



The information for each flag is explained in this table.

Field	Description
Title	The title of the content block being flagged. Clicking this link brings you to a detailed description of the content's flag.
Display Name	The name of the user who flagged the content as it is displayed on the Web site.
Date	The date the content was flagged.
Flag	The specific flag from the flagging definition for this content.
Comment	Any comments added by the user who flagged the content.

From this screen, you can perform the following actions:

- View the details of a submitted content flag - see "Viewing a Flag's Details" on page 985

- Generate a Flagged Content report - see "Generating a Flagged Content Report" on page 981
- Print a list of flagged content - see "Printing a List of Flagged Content" on page 982
- Email a list of flagged content - see "Email a List of Flagged Content" on page 982
- Filter flagged content by folder - see "Filtering Flagged Content by Folder" on page 983
- Filter flagged content by language - "Filtering Flagged Content by Language" on page 983

Generating a Flagged Content Report

By default the Content Reports: Recent Flags screen shows content flagged within the last ten days. To generate a different report, follow these steps.

1. In the Workarea, navigate to **Modules** > **Community Management** > **Flagging** > **Flagged Content**.
2. In the **Showing flags for the last # days** field, enter a new number of days for which to show Flagged Content.

3. Click the **Report** button ( ).
4. The page refreshes, and the list contains the new report.

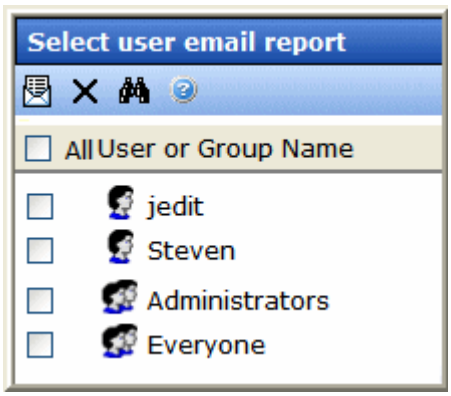
Printing a List of Flagged Content

On the Content Reports: Recent Flags screen, you can output the flagged content report to a printer by clicking the Print button ( ). This creates an HTML version of the list that opens in a browser. From the browser, you can print the list by using the browser print functionality.

Email a List of Flagged Content

You can email the a list of flagged content to any other CMS400.NET user. This does not include membership users. To email a flagged content list, follow these steps.

1. In the Workarea, navigate to **Modules** > **Community Management** > **Flagging** > **Flagged Content**.
2. Either create a new Flagged Content report or use the existing one.
3. Click the Email button ( ).
4. The **Select user email report** screen appears.

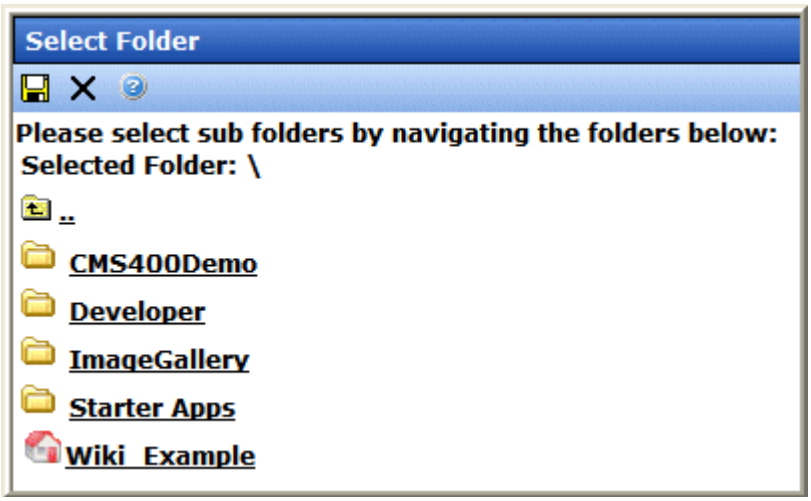


5. Place a check next to each user to whom you want to email the report.
6. Click the Email button ( ).
7. If necessary, enter your email address and click the Email button ( ) again.
8. The list of flagged content is sent.

Filtering Flagged Content by Folder

From the Content Reports: Recent Flag screen, you can filter flagged content by folder. This allows you to see only flagged content for a specific folder. To filter flagged content by folder, follow these steps.

1. In the Workarea, navigate to **Modules** > **Community Management** > **Flagging** > **Flagged Content**.
2. Click the Filter button ( )
3. The Select Folder screen appears.



4. Select a folder.
5. Click the Save button ( ).
6. The page refreshes, and any flagged content in the folder is shown.

NOTE Only flagged content that falls within the time frame for the **Showing flags for the past # days** field is shown. For example, if the field is set to five when you filter by a folder, only content that's been flagged in the last five days appears.

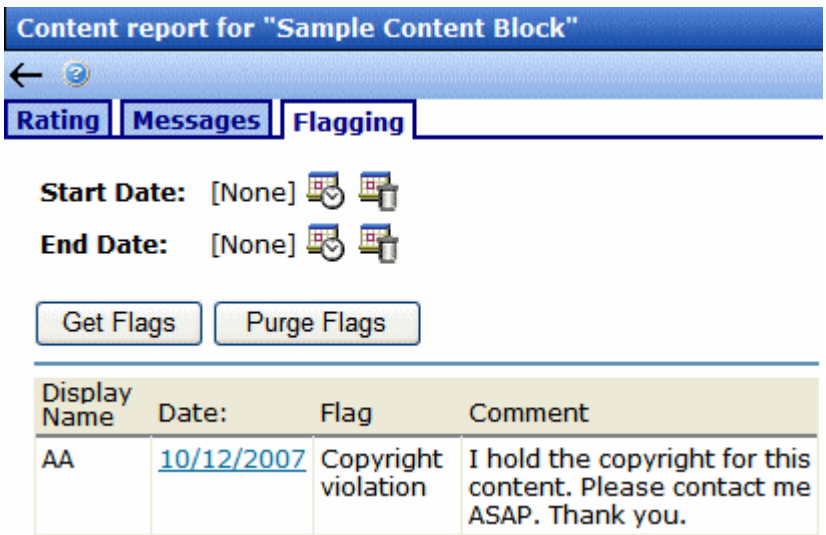
Filtering Flagged Content by Language

To see flagged content for a specific language, select the language from the **Language** drop down box. When the page refreshes, only flagged content associated with the language appears.

Viewing a Content Item's Flags

You can also view flags for a specific content item. This allows you to see only flags associated with that content item. Flags for a content item can be found on the **Content Report** screen > **Flagging** tab. From this screen, you can filter the flags by a date range or see all flags associated with the content. In addition, this screen contains a purge button which allows you to remove all flags associated with this content. This subsection contains the following topics:

- "Getting Flags for a Content Item" on page 984
- "Purging Flags for a Content Item" on page 985



Getting Flags for a Content Item

Follow the steps below to get flags for a content item.

1. In the **Workarea**, find the content block for which to retrieve content flags.
2. Click the title of the content block.
3. The **View Content** screen appears.
4. Click the Content Reports button ( ).

5. Click the Select Date button ( ) next to Start Date to select a start date.
6. Click the Select Date button ( ) next to End Date to select an end date.

NOTE To retrieve all flags for a content item, leave the Start Date and End Date blank.

NOTE To remove a Start Date or End Date, click the Delete Date button ( ).

7. Click the **Get Flags** button.
8. A list of flags is displayed.

Purging Flags for a Content Item

If you need to delete flags for a content item, follow these steps.

1. In the Workarea, find the content block for which to purge content flags.
2. Click the title of the content block.
3. The **View Content** screen appears.
4. Click the Content Reports button ( ).
5. Click the Select Date button ( ) next to **Start Date** to select a start date.
6. Click the Select Date button ( ) next to **End Date** to select an end date.

NOTE To purge all flags for a content item, leave the Start Date and End Date blank.

NOTE To remove a Start Date or End Date, click the Delete Date button ( ).

7. Click the **Purge Flags** button.
8. The flags are removed.

Viewing a Flag's Details

Viewing a flag's detail information allows you to read the entire comment if it is truncated in one of the lists. You can also edit or delete the flag from this screen.

To view detailed flag and comment information, follow these steps.

1. Navigate to one of these area in the Workarea:
   - **Smart Desktop** > **Content Flags**
   - **Modules** > **Community Management** > **Flagging** > **Flagged Content**
   - **Content Reports** > **Flagging tab** for a content item
2. Click either a flag's content title or the flag's date.
3. The flag's detail information appears.

See Also: "Editing a Flag's Details" on page 986; "Deleting a Flag" on page 987

Editing a Flag's Details

Editing a flag allows you to change the flag's selection or the comments for a flagged content item. This can be useful if a user selects the wrong flag by mistake or you want edit a particular flag's comments. For example, a user selects the "Offensive Content" flag and he meant to click the "Copyright Violation" tag.

To edit a flag or its comment information, follow these steps.

1. Navigate to one of these area in the Workarea:
   - **Smart Desktop** > **Content Flags**
   - **Modules** > **Community Management** > **Flagging** > **Flagged Content**
   - **Content Reports** > **Flagging tab** for a content item
2. Click either a flag's content title or the flag's date.
3. The flag's detail information appears.
4. Click the Edit button ( ).
5. Change the flag or edit the comments.
6. Click the Save button ( ).
7. The flag's information is changed.

Deleting a Flag

When you do not need a flag, you can delete it from the system. When you do, the flag is permanently removed.

To delete a flag, follow these steps.

NOTE To remove all flags associated with a specific content item, see "Purging Flags for a Content Item" on page 985.

1. Navigate to one of these area in the **Workarea**:
   - **Smart Desktop** > **Content Flags**
   - **Modules** > **Community Management** > **Flagging** > **Flagged Content**
   - **Content Reports** > **Flagging tab** for a content item
2. Click either a flag's content title or the flag's date.
3. The flag's detail information appears.
4. Click the Delete button ( ).
5. A dialog appears asking you to confirm the deletion.
6. Click **OK**.

Email Invites For Community Management

The Community Platform's email notification feature enables Ektron CMS400.NET to generate email that invites a user to join the site, a community group or become a colleague of another user.

For example, a message might be sent when someone in a community group wants another user to join the group.

Creating the Email Message

You can create an email message to be sent when a user invites another user to join a group, the site or invite them to be a friend. A simple editor lets you apply some XHTML formatting the message.

Including Variables in the Default Message

The messages can include variables that retrieve information about the person who's sending the invite or the link to join a group and display it in the message text. The variables are surrounded by at signs (@). For example:

```
@appSenderName@ is used to display the name of the user sending the
invite.
```

In the email, this text might read:

```
Alan Administrator has invited you to join the Marketing Community
Group.
```

You can use the following variables in the body of an email notifications.

Variable	Displays this information in the email
@appOptionalText@	Text that the user types into the Optional Text box on the Invite server control.
@appSenderName@	The name of the person sending the invitation
@appFriendDisplayName@	The name of the person to which the invite is being sent.
@appInvitedEmail@	The email address of the person being invited.
@appInviteId@	Used for appending the invite ID to the registration URL. For example: Click here to accept.
@appGroupName@	The name of the group a person is being invited to join.

To create a message, follow these steps.

1. In the Workarea, go to **Modules > Community Management > Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the message.

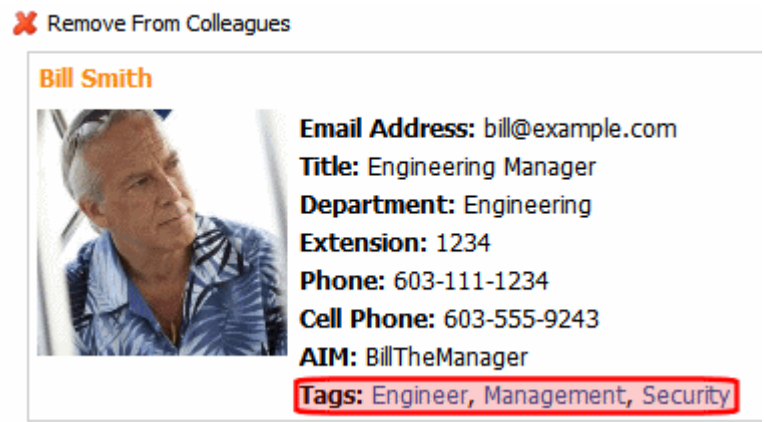
4. At the **Type** field, select either **FriendInvitation, SiteInvitation or GroupInvitation**.
5. Select whether to make the email message a Default message.
6. In the **Subject** box, add a subject for the email.
7. In the editor, enter the message text. Use the variables listed in the table above to retrieve information about the about the invitation and display it in the message.
8. Click the Save button ( ).

Tags

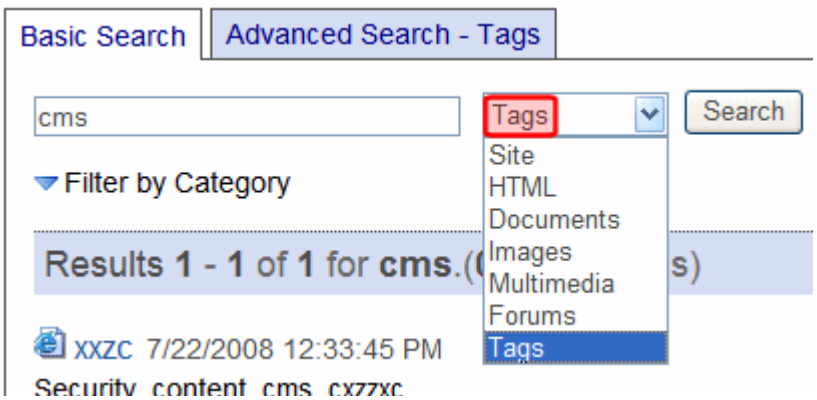
NOTE This section discusses Tags for use with the Community Platform. Information on tagging blog entries can be found in the User Manual section “Blogs” > “Blog Post” > “Adding A Blog Post” > “Tags on the Summary Page.”

Tags are keywords that can be assigned to users, groups, content, and library items.

On a Web site, tags for a user or group appear in a profile, helping site visitors to learn about a user or group.

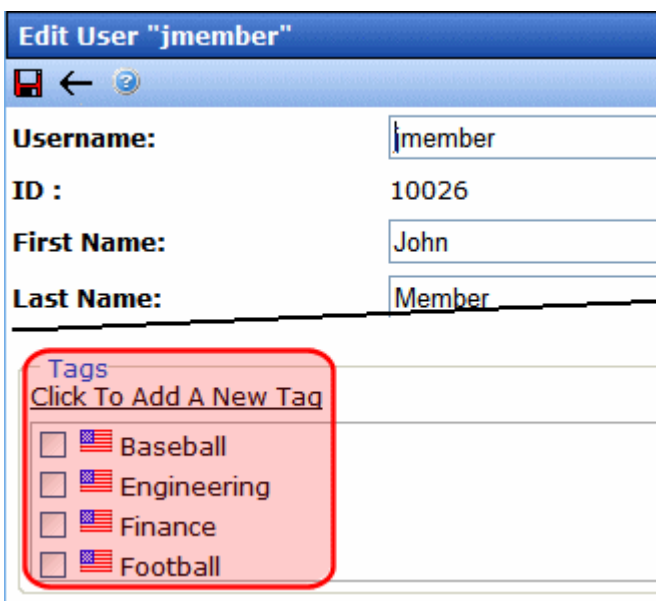


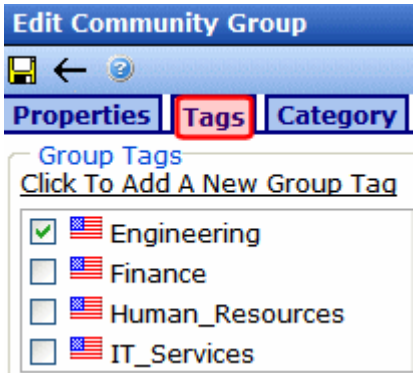
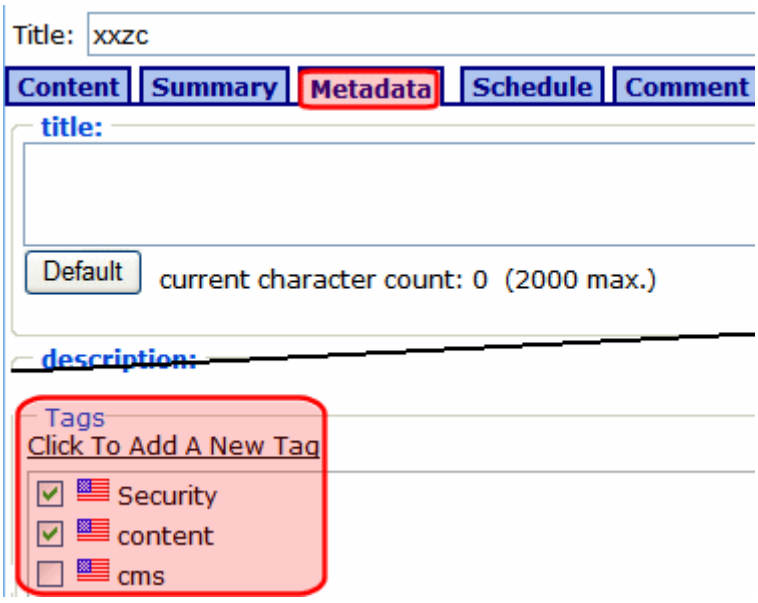
Tags also allows users to perform tag-based searching, as shown below.

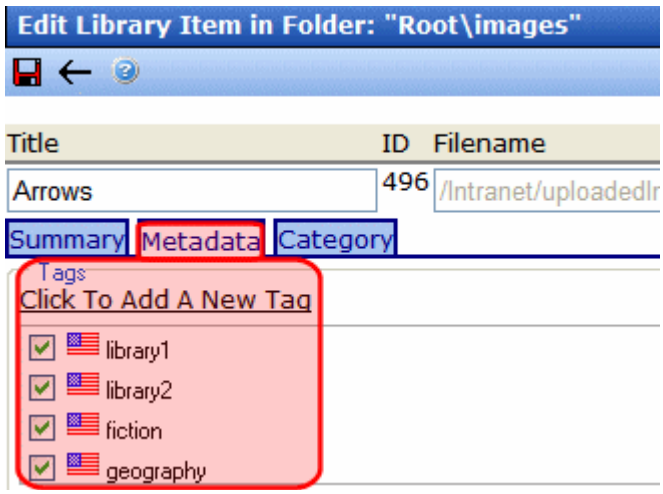
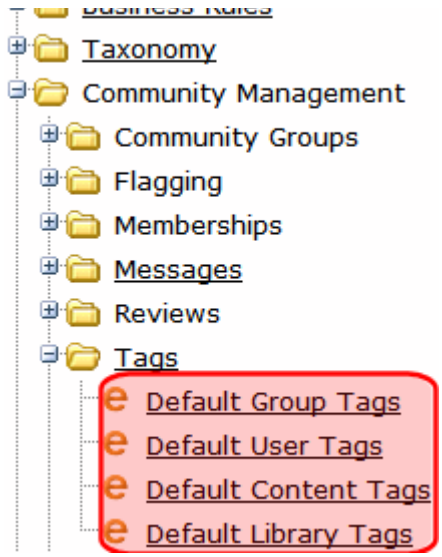


So, for example, you could tag all content related to a new product release with the name “Widgets 2.0.” Anyone could enter that term into the Search box, click **Tags** from the dropdown list (shown above), then the **Search** button to find all related content.

In the Workarea, tags are used in the following locations.

Location	Image
User Information screen’s **Tags** area, for users or membership users	

Location	Image
The Community Group screen's **Tags** tab	
A content item's **Metadata** tab > **Tags** area	

Location	Image
A library item's **Metadata** tab > **Tags** area	
Modules > Community Management > Tags	

DEVELOPER'S NOTE The CommunityGroupBrowser, CommunityGroupProfile, and CommunityGroupList Server Controls can display group tags and link them to a list of all groups that share the tag. Also, the TagCloud server control displays a weighted list of tags. For more information, see the Ektron CMS400.NET Developer's Manual.

The rest of this section explains tags through the following topics.

- "Tag Types" on page 993

- ”Creating Default Tags” on page 993
- ”Creating User-Created Tags” on page 998
- ”Managing Tags” on page 999
- ”Viewing a Tag’s Details” on page 1000
- ”Deleting Tags” on page 1000

Tag Types

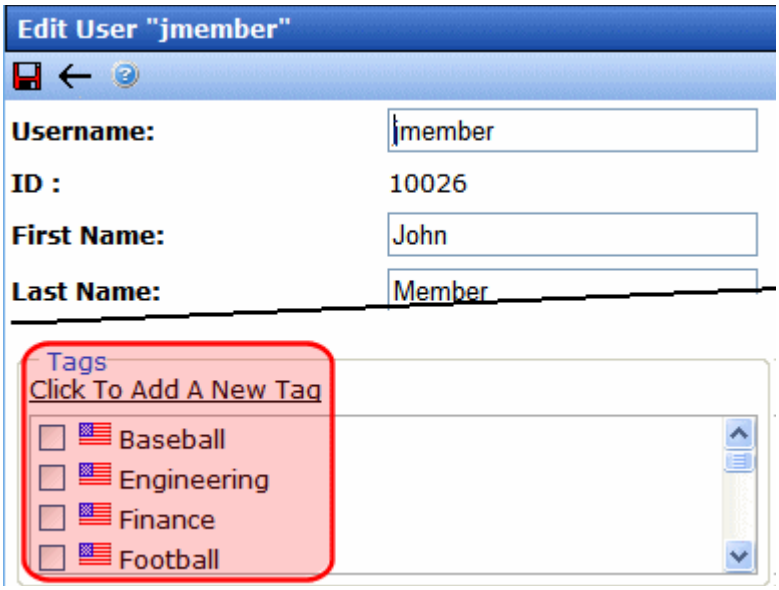
There are basic two types of tags, and they are contrasted below.

Type	Description	For more information, see
Default	• created by system administrator in **Modules > Community Management > Tags** area • appear as checkbox options wherever tags can be applied	”Creating Default Tags” on page 993
User-created	• created by user as needed wherever tags can be applied	”Creating User-Created Tags” on page 998

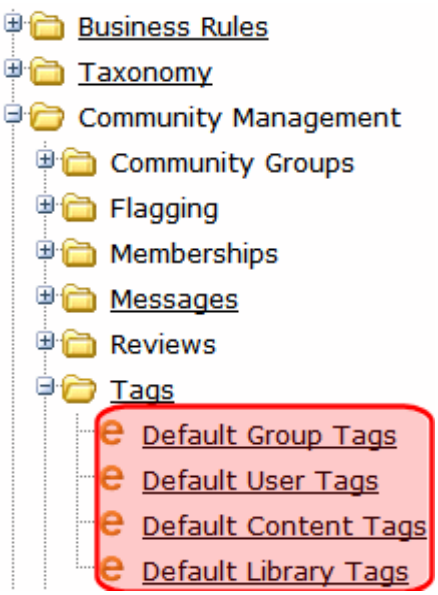
Creating Default Tags

An **Ektron CMS400.NET** administrator can create default tags for each object (user, user group, content or library item). For example, you want to allow users to associate themselves with a favorite race car driver. You create a default user tag for each driver’s name.

When a user creates or edits an item for which you created the default tags, they appear and the user clicks inside check boxes to assign them.



Ektron CMS400.NET provides separate screens for creating default tags for user groups, users, content and library items. They are available via **Modules** > **Community Management** > **Tags** (shown below).

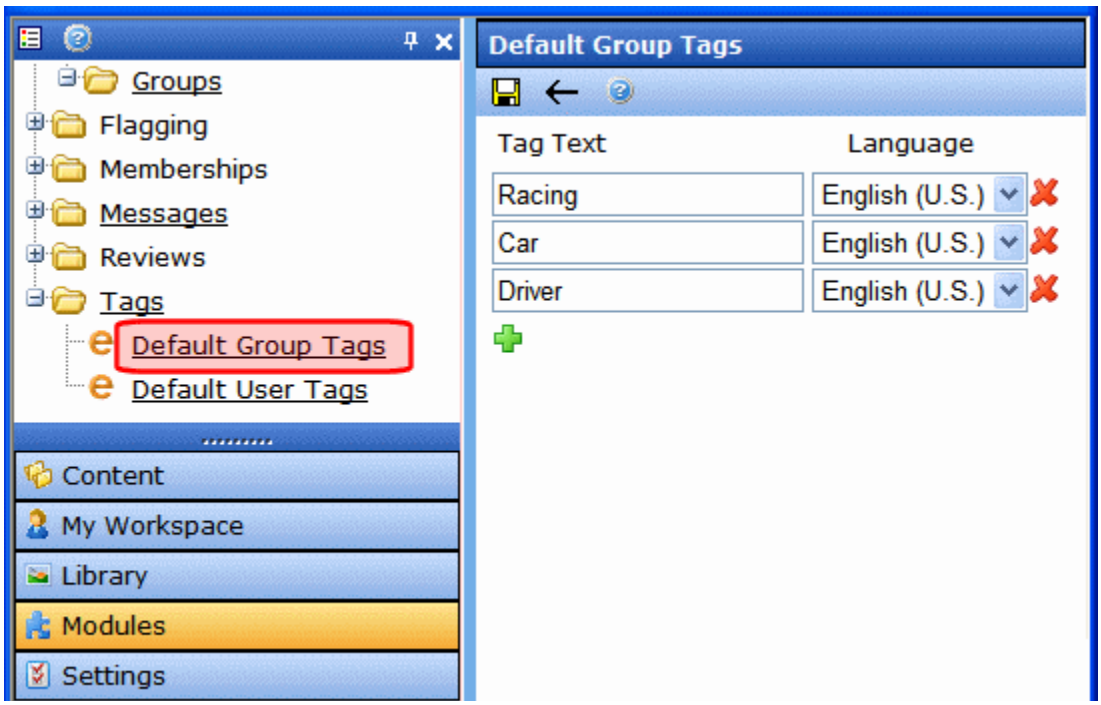


See Also:

- ”Adding Default Group Tags” on page 995
- ”Adding Default User Tags” on page 996
- ”Adding Default Content Tags” on page 996
- ”Adding Default Library Tags” on page 997

Adding Default Group Tags

The Default Group Tags screen lets you add tags that may be assigned to community groups.



To add a Default Group Tag, follow these steps.

1. In the Workarea, navigate to **Modules > Community Management > Tags > Default Group Tags**.
2. Select a language for the tag.
3. Add the tag in the empty text box. If no empty box appears, click the Add button ( ) then enter the tag.

4. Click the Save button ( ).

Adding Default User Tags

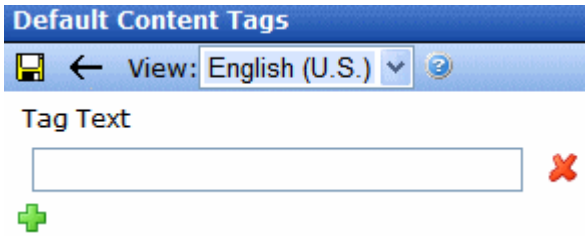
The Default User Tags screen allows you to add tags that may be assigned to a user.

To add a Default User Tag, follow these steps.

1. In the Workarea, navigate to **Modules > Community Management > Tags > Default User Tags**.
2. Select a language for the tag.
3. Add the tag in the available text box. If no text box is available, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

Adding Default Content Tags

The Default Content Tags screen allows you to add tags that may be assigned to a content.

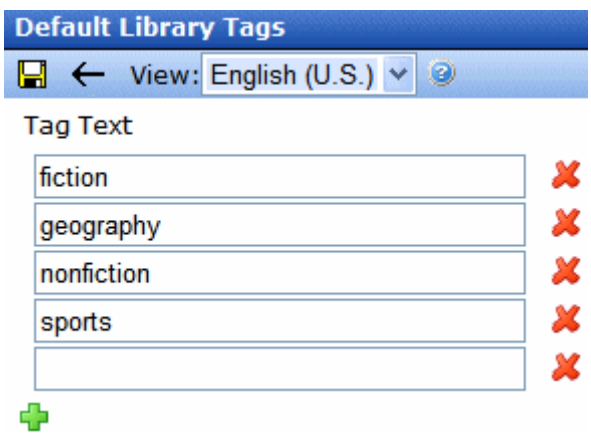


To add a Default Content Tag, follow these steps.

1. In the Workarea, navigate to **Modules > Community Management > Tags > Default Content Tags**.
2. Select a language for the tag.
3. Add the tag in the available text box. If no text box is available, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

Adding Default Library Tags

The Default Library Tags screen allows you to add tags that may be assigned to a library.



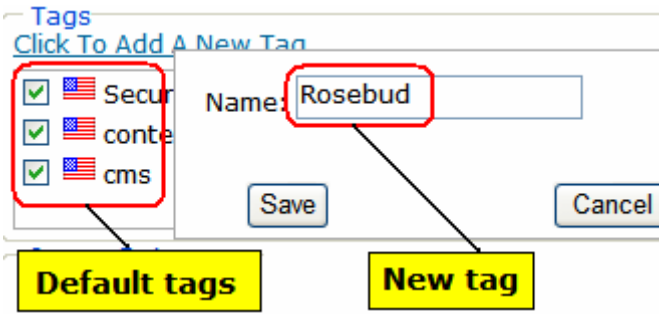
To add a Default Library Tag, follow these steps.

1. In the Workarea, navigate to **Modules > Community Management > Tags > Default Library Tags**.
2. Select a language for the tag.
3. Add the tag in the available text box. If no text box is available, click the Add button ( ) then enter the tag.
4. Click the Save button ( ).

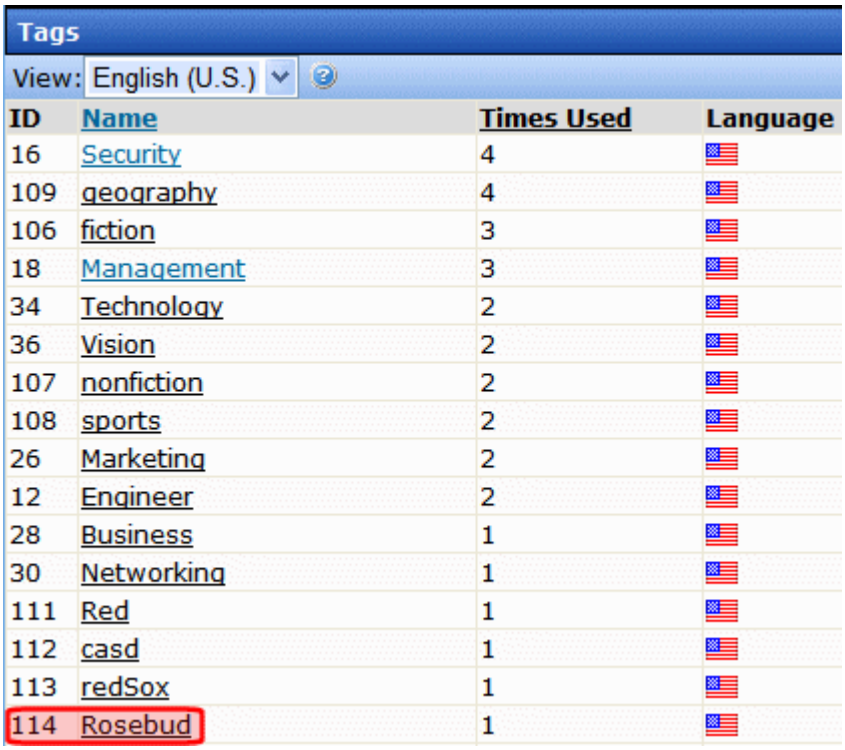
Creating User-Created Tags

In addition to applying default tags, users, community group leaders, and content editors can create their own tags. This allows for a more diverse and creative list of tags.

For example, a user is editing content. He reviews the default tags but decides that none is correct. So, he creates and assigns a new tag: **Rosebud**. That tag is now applied to that content.



The user-created tag also appears on the **Modules> Community Management > Tags** screen, where you can see its ID number.



Tags

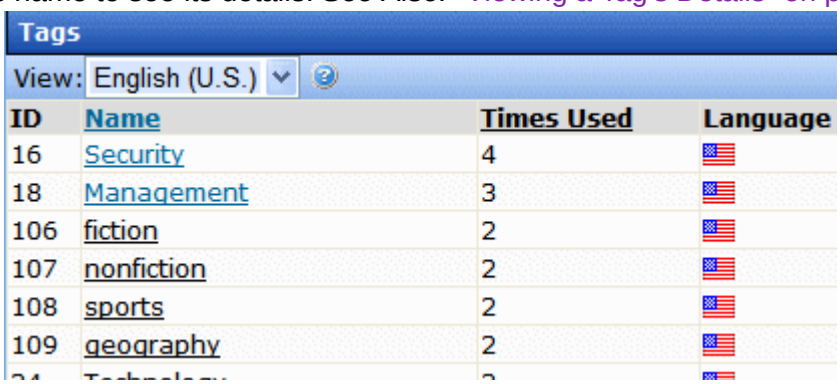
View: English (U.S.)

ID	Name	Times Used	Language
16	Security	4	
109	geography	4	
106	fiction	3	
18	Management	3	
34	Technology	2	
36	Vision	2	
107	nonfiction	2	
108	sports	2	
26	Marketing	2	
12	Engineer	2	
28	Business	1	
30	Networking	1	
111	Red	1	
112	casd	1	
113	redSox	1	
114	Rosebud	1	

If someone creates another tag with the same exact name, the new tag will share the ID number with the previous one, and the **Times Used** will increase from **1** to **2**. However, the new tag will not appear as a default on any screen.

Managing Tags

Administrators manage tags from the **Modules > Community Management > Tags** screen. This screen displays all default and user-created tags. You can filter the list by language. Click any tag's name to see its details. *See Also:* "Viewing a Tag's Details" on page 1000



Tags

View: English (U.S.)

ID	Name	Times Used	Language
16	Security	4	
18	Management	3	
106	fiction	2	
107	nonfiction	2	
108	sports	2	
109	geography	2	

This screen displays the following information about each tag.

Field	Description
ID	Its integer ID
Name	Its title
Times Used	The number of times a tag has been assigned
Language	Its language. This appears as a national flag. For example, American English appears as .

Viewing a Tag's Details

When you click a tag's name, its details appear on the View Tag screen.

Field	Description
ID	The integer ID of the tag.
Language	The language assigned to the tag.
Name	The title of the tag.
Tagged Type	Shows how the tag is assigned: to a community group, user, content, or library item. *See Also:* "Adding Default Group Tags" on page 995 and "Adding Default User Tags" on page 996
Times Used	The number of times this tag is assigned to each Tagged Type.

Deleting Tags

As mentioned above, there are two basic tag types: user-created and default. (*See Also:* "Tag Types" on page 993). The following table contrasts how to delete tags.

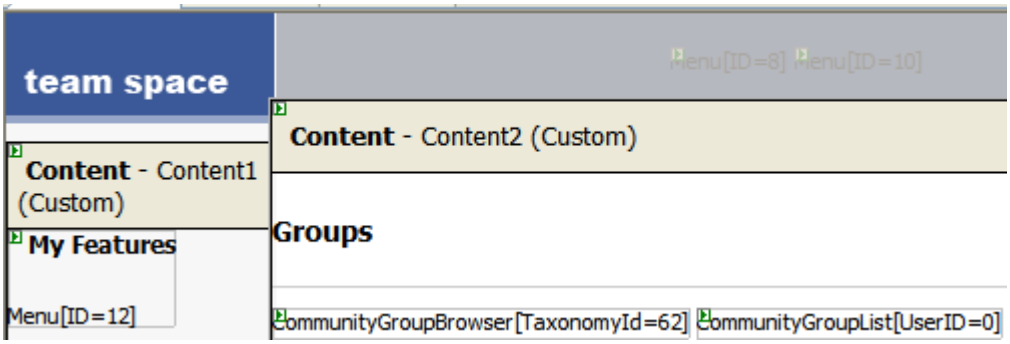
Tag Type	Result	Procedure
User-created	Delete a single tag	1. Open the item's **Tags** area. For example, for content, edit the **Metadata** tab. 2. Uncheck the checkbox next to the tag. 3. Publish the content.
	Delete all occurrences of a tag	1. Go to the **Modules > Community Management > Tags** screen. 2. Click the tag. 3. Click the delete button ( ). 4. A confirmation screen appears. 5. Click **OK**.

Tag Type	Result	Procedure
Default	There are two methods for deleting default tags. Each has different results.	
	Deleting a Default Tag • No longer available for assignment to users, content, etc. • Existing links to it remain	1. Go to **Modules > Community Management > Tags** 2. Select the screen for the kind of tag you want to delete (group, user, content or library). 3. Select the language. 4. Click the red **X** to the right of the tag you want to delete (see below). 5. You are asked if you are sure. Click **OK**. 6. Click the save button ( )
	Deleting a Default Tag and All of its Links • No longer available for assignment to users, content, etc. • Existing links to it are deleted	1. Go to the **Modules > Community Management > Tags** screen. 2. Click the tag. 3. Click the delete button ( ). 4. A confirmation screen appears. 5. Click **OK**.

Assigning Templates to Groups and Members

As mentioned in ”Community Management” on page 948, **Ektron CMS400.NET** ‘s Community Management feature supports both community and individual member pages. Like other **Ektron CMS400.NET** content, Community Management content appears on a dynamic Web page. Page templates determine each page’s layout and location of elements (menus, content, blogs, etc.). Below is a sample Community Management template. *See Also:* ”Creating/Updating Templates” on page 70

Sample Group Template within Visual Studio.NET



Sample Group Template on a Web Page

The Community Management feature includes six templates:

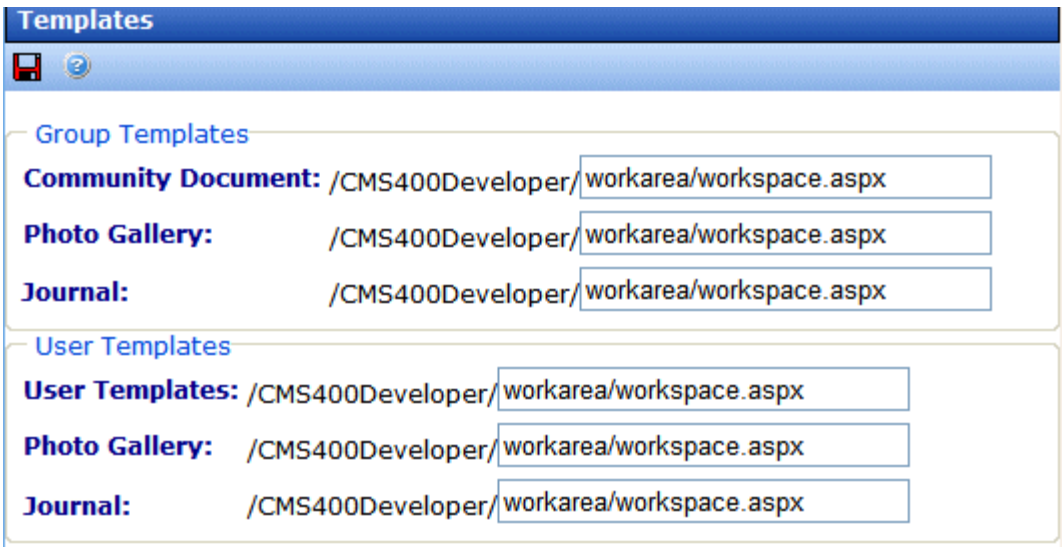
- Community Group
  - documents
  - photos
  - journal
- User
  - documents
  - photos
  - journal

Ektron CMS400.NET provides a sample for each template. You can use the sample or create your own. If you begin with a sample

template and modify it, be sure to save it under a different name to prevent it from being overwritten when you upgrade.

The Templates Screen

Use the Templates screen to assign templates to Community Management pages.



The following table explains the fields on the Templates screen.

Field	Page that displays template
Group Templates	
Community Document	Page hosts the CommunityDocuments Server Control; ObjectType property is set to **Group**
Photo Gallery	Page hosts the PhotoGallery Server Control; ObjectType property is set to **Group**
Journal	Page hosts the Blog Server Control, and the blog was created for a group page

Field	Page that displays template
User Templates	
Community Document	Page hosts the CommunityDocuments Server Control; ObjectType property is set to **User**
Photo Gallery	Page hosts the PhotoGallery Server Control; ObjectType property is set to **User**
Journal	Page hosts the Blog Server Control, and the blog was created for a user page

Multi-Site Support

Ektron CMS400.NET's multi-site support feature lets you set up and manage several Web sites under one CMS. For example:

- `www.example.com`
- `support.example.com`
- `forums.example.com`

All sites share a single database. The multi-site support feature does not support multiple databases.

Multi-site support is explained through the following topics.

- ”Advantages of Multi-Site Configurations” on page 1006
- ”Prerequisites” on page 1006
- ”Using Multi-Site Configurations” on page 1007
- ”Installing the Multi-Site Support Feature” on page 1007
- ”Using eSync in a Multi-site Environment” on page 1364

Advantages of Multi-Site Configurations

- The URL can indicate the nature of the site to visitors.
- All sites can share
  - common content, but appear within their own site and templates
  - the library of images and files. These files can be stored once, yet authors can insert them into content from any site.

Prerequisites

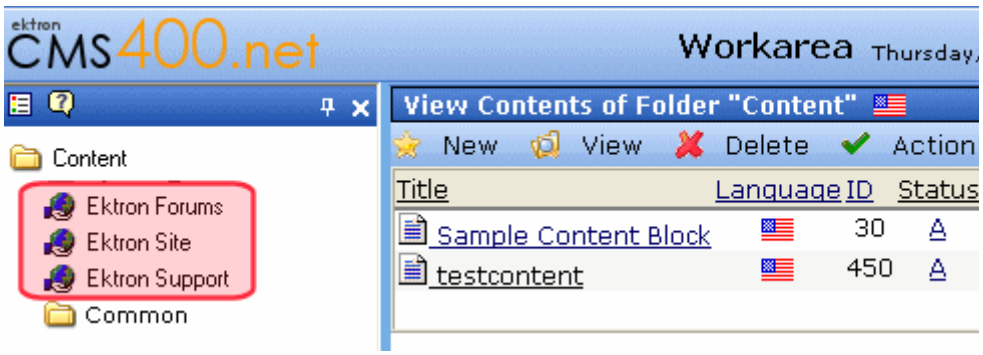
- The server must run Windows Server 2003 or 2008

NOTE Windows XP supports only one Web site.

- All sites reside on the same server

Using Multi-Site Configurations

Within the Workarea, sites appear under **Ektron CMS400.NET**'s folder structure but the icon is a globe (see illustration below). So, an author can create and edit content in the additional site the same way he works with content in the root site.



Authors log into a root site then begin editing content in the additional site. Regardless of which site he is using, an author can use the library to insert hyperlinks, images, files, and quicklinks.

When a folder has a production domain assigned to it, it is a *domain folder*. Links to content in a domain folder are activated via linkit.aspx, which redirects to the appropriate domain name and uses the appropriate template for the folder or content.

WARNING! You cannot create a quicklink within content, a collection, menu, etc. to a form that resides in another site.

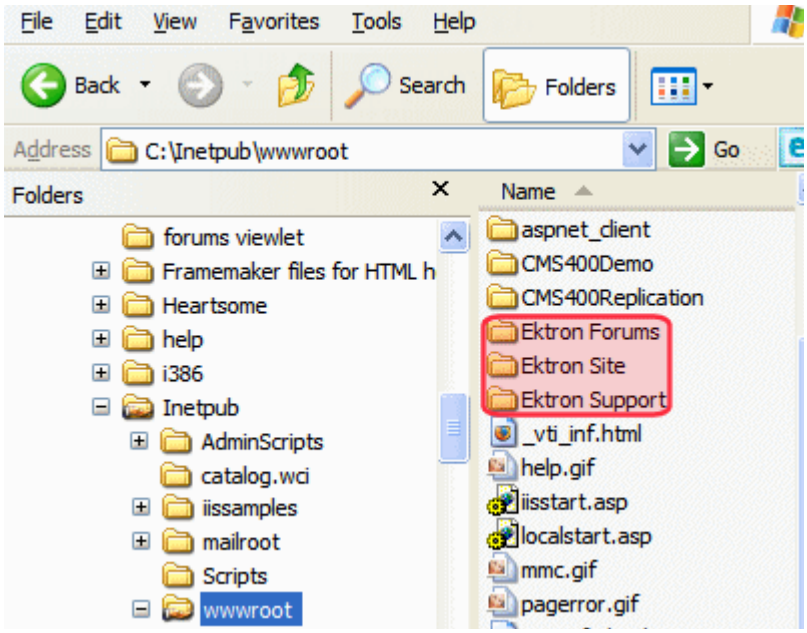
Installing the Multi-Site Support Feature

There are three major steps to setting up each new site.

- "Step 1: Create New Folders in the File System" on page 1008
- "Step 2: Create New Sites in IIS" on page 1009
- "Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET" on page 1018

Step 1: Create New Folders in the File System

1. Using Windows Explorer, navigate to the `C:\Inetpub\wwwroot` folder.
2. Create a new folder for each site.



3. Copy the following CMS files and folders from the original CMS site to your new multi-site folder.
   - all individual files (not subdirectories)
   - all .config files in all directories under the site root
   - these subdirectories
     - bin
     - WorkArea
     - App_Code
     - AssetManagement
4. Within each new site folder, open the web.config file and update the `ek_sitePath` and `WSPath` elements with your CMS site path.

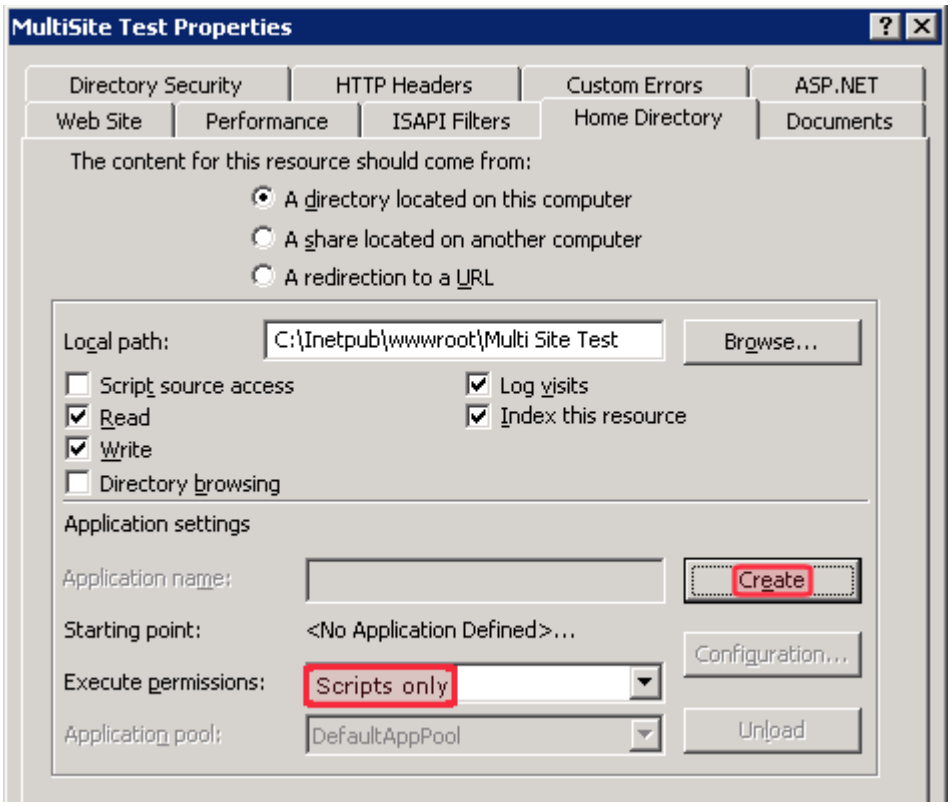
If your CMS site is in the Web site root, enter slash (/). If it is in a subdirectory of the Web site, enter the subdirectory name.

For example, if your web site root is `C:\inetpub\wwwroot` and it has a subdirectory called `CMS400Min`, enter `CMS400Min` as the site path.

Step 2: Create New Sites in IIS

Follow these steps to create each new site in IIS.

1. Go to **Start > Programs > Administrative Tools > Internet Services Manager**.
2. Right click the Web Sites folder and click **New > Web Site**.
3. A wizard screen appears. Click **Next**.
4. Enter a name for the new site.
5. On the IP Address and Port Settings screen, enter the IP address of your new Web site or the host header. Press **Next**.
6. On the Web Site Home Directory screen, browse to the new site's folder. You created it in "Step 1: Create New Folders in the File System" on page 1008.
7. On the Web Site Access Permission screen, make sure that **Read** and **Write** are checked.
8. You are notified that you have completed the new site.
9. Make the new site an application. To do this, right click the site, and select **Properties**. Then, click the **Home Directory** tab. Under **Application Settings** area, click the **Create** button then click **OK**.



10. Set **Execute permissions** to **Scripts only**.

Create Virtual Folders in IIS

In IIS, for each new Web site, create one new virtual folder for the following shared folders:

- assets
- privateassets
- uploadedfiles
- uploadedimages

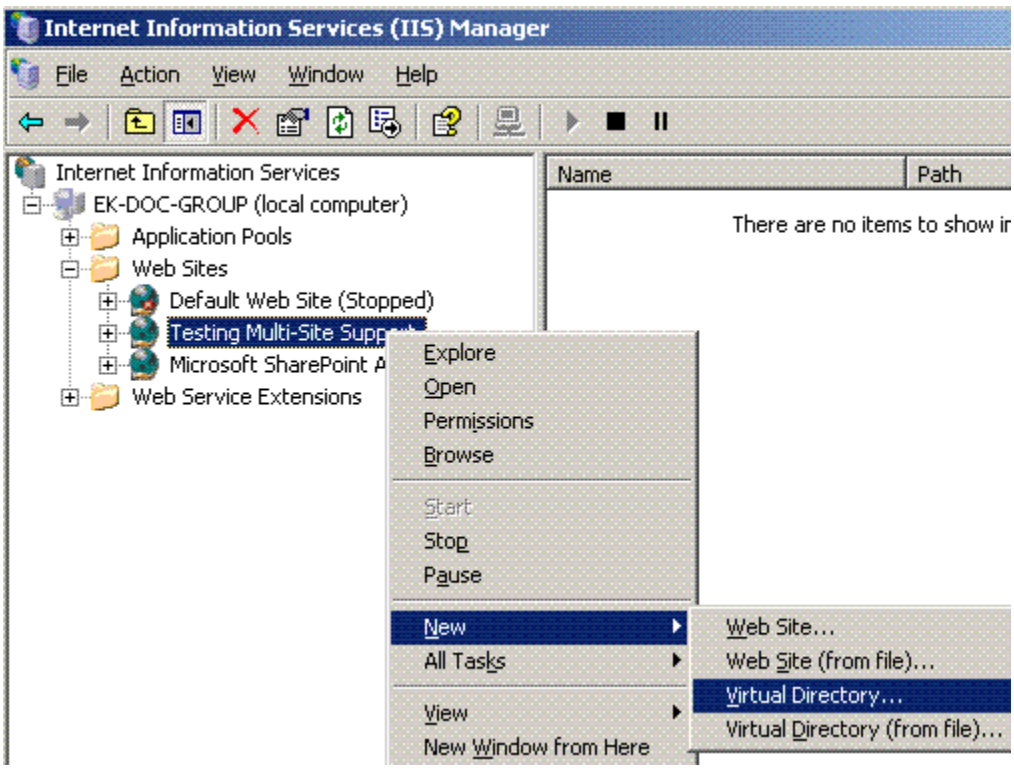
These folders are created when you install **Ektron CMS400.NET**. If you did a normal installation, they reside under the site directory. For example, `C:\Inetpub\wwwroot\`*`your site root`*`\uploadedimages`.

To create virtual versions of these folders, follow these steps.

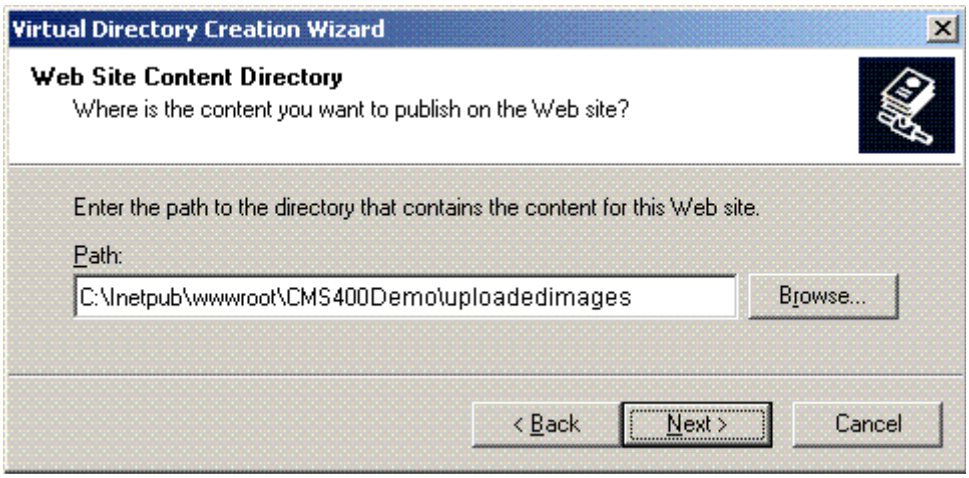
- "Creating Virtual Folders in IIS6" on page 1011
- "Creating Virtual Folders in IIS7" on page 1013

Creating Virtual Folders in IIS6

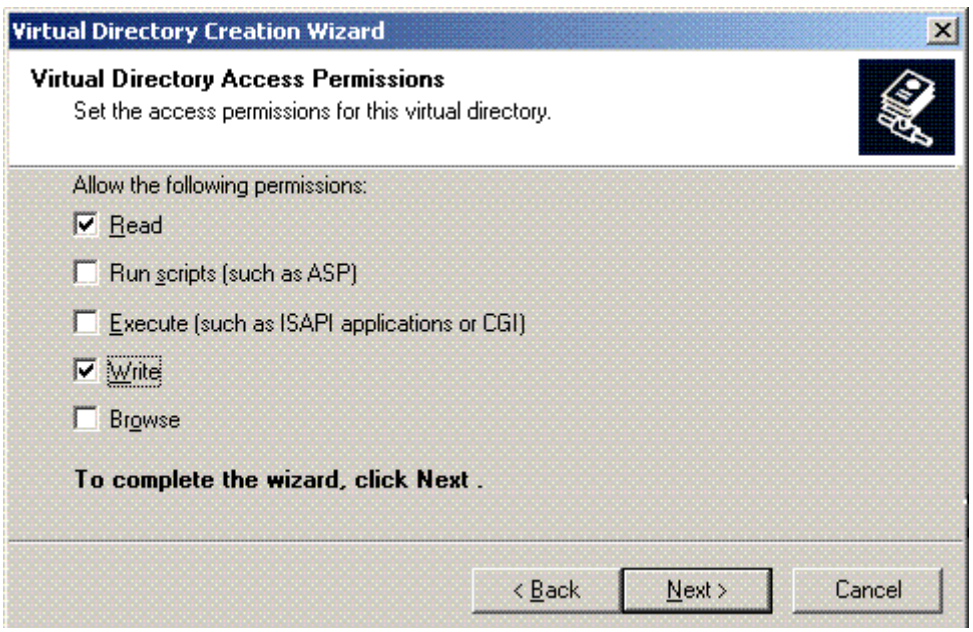
1. In IIS, select the new site folder you created in "Step 2: Create New Sites in IIS" on page 1009.
2. Right click the mouse and select **New > Virtual Directory**.



3. Identify the corresponding subfolder in the root folder.


Virtual Directory Creation Wizard
Web Site Content Directory
Where is the content you want to publish on the Web site?
Enter the path to the directory that contains the content for this Web site.
Path:
C:\Inetpub\wwwroot\CMS400Demo\uploadedimages
Browse...
< Back
Next >
Cancel

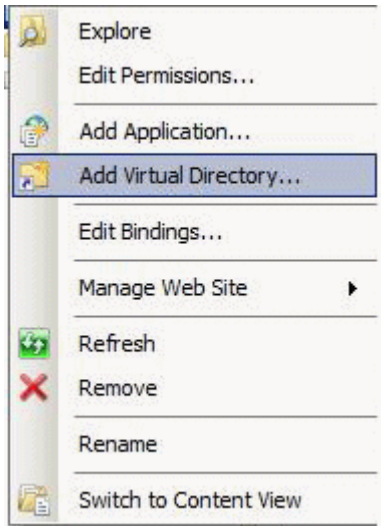
4. Assign Read and Write permissions to the virtual directory.



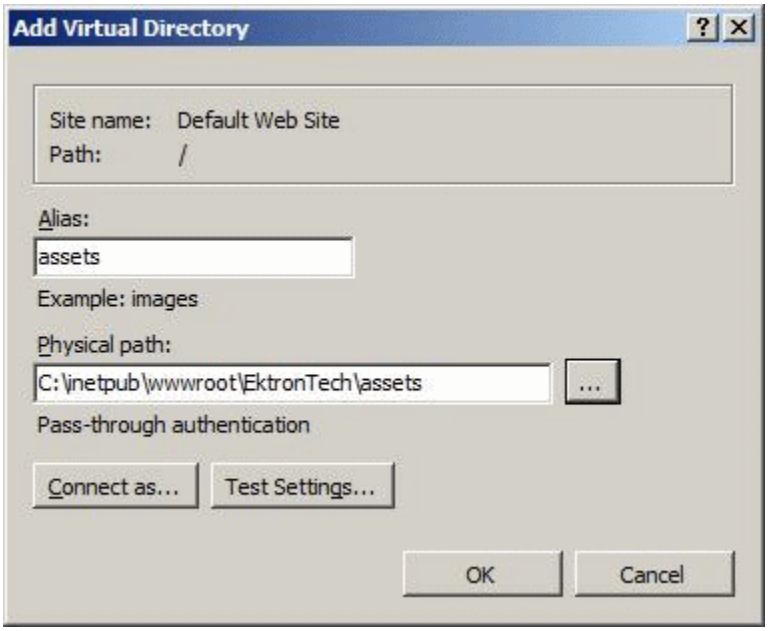
5. Follow this procedure for all four folders: assets, privateassets, uploadedfiles, uploadedimages.

Creating Virtual Folders in IIS7

1. In IIS, select the new site folder you created in "Step 2: Create New Sites in IIS" on page 1009.
2. Right click the mouse and select **Add Virtual Directory**.



3. Identify the corresponding subfolder in the root folder.

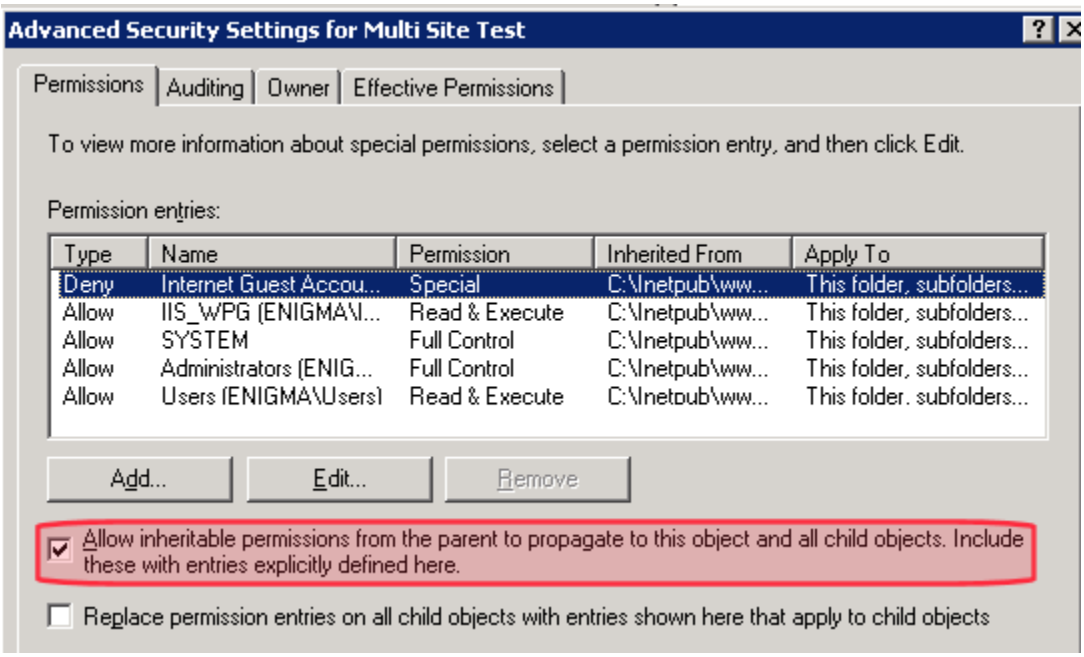


4. Follow this procedure for all four folders: assets, privateassets, uploadedfiles, uploadedimages.

Set File System Permissions on New Folders

To do this, follow these steps:

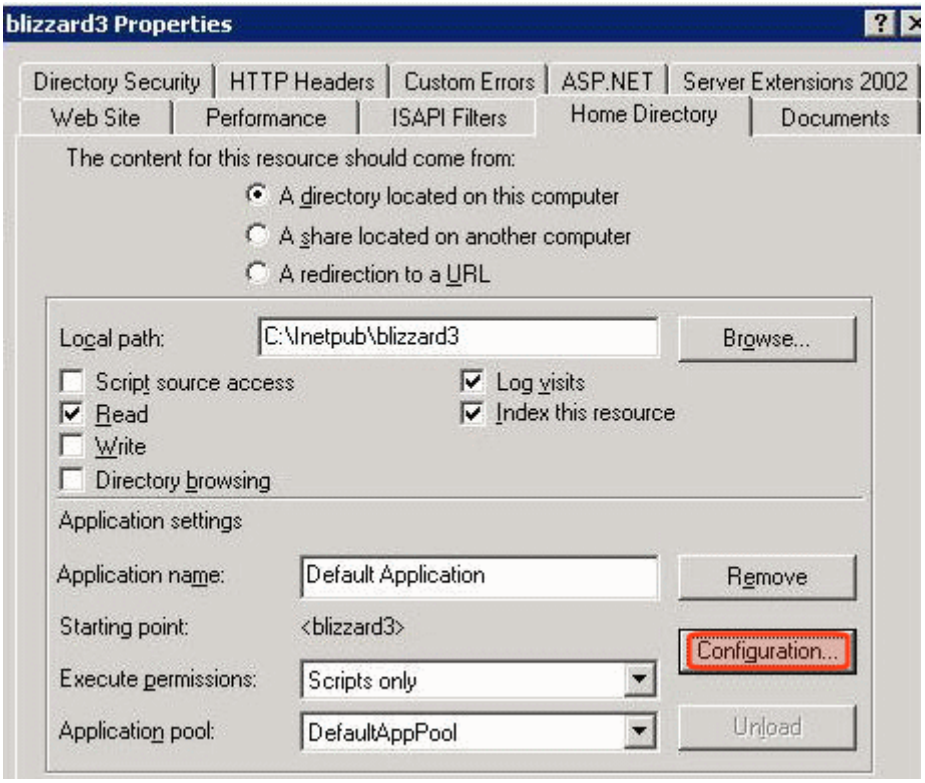
1. Using Windows Explorer, navigate to the new folder(s) you created in "Step 1: Create New Folders in the File System" on page 1008.
2. Right click the folder and click **Properties**.
3. Click the **Security** tab.
4. Click the **Advanced** button.
5. Click the check box next to **Allow Inheritable Permissions from the Parent to Propagate**…



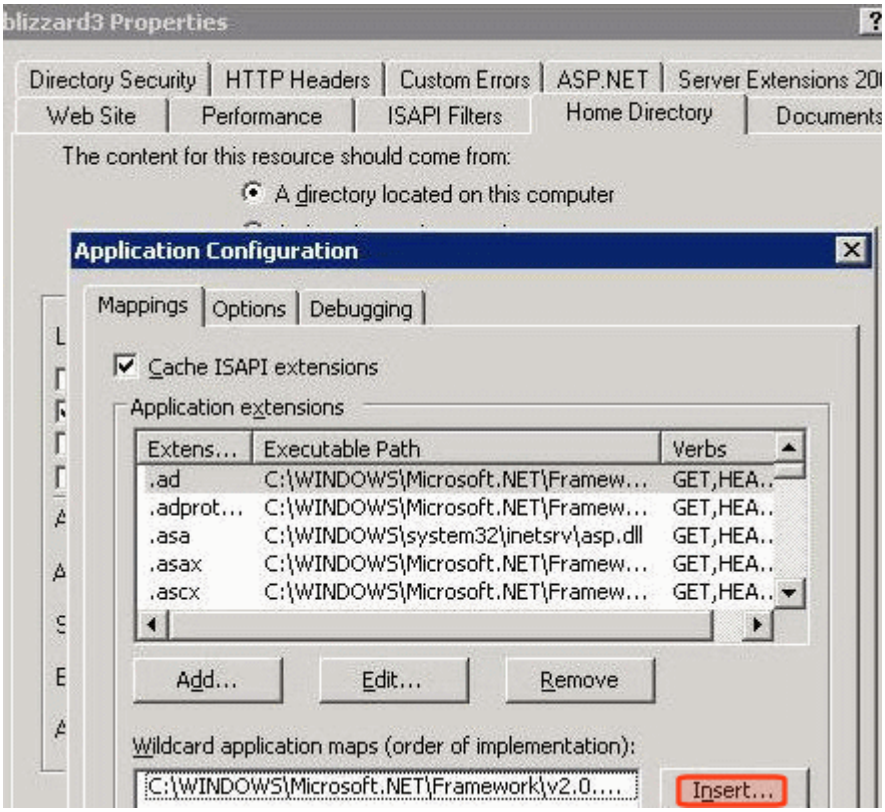
Install the aspnet_isapi.dll File

Follow this procedure to install the aspnet_isapi.dll file for every new site.

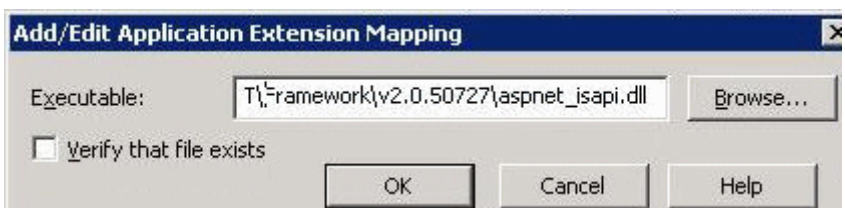
1. Open IIS.
2. Navigate to an **Ektron CMS400.NET** Web site.
3. Right click the site and select **Properties**.
4. On the Properties screen's **Home Directory** tab, click the **Configuration** button.



5. The Application Configuration screen appears.



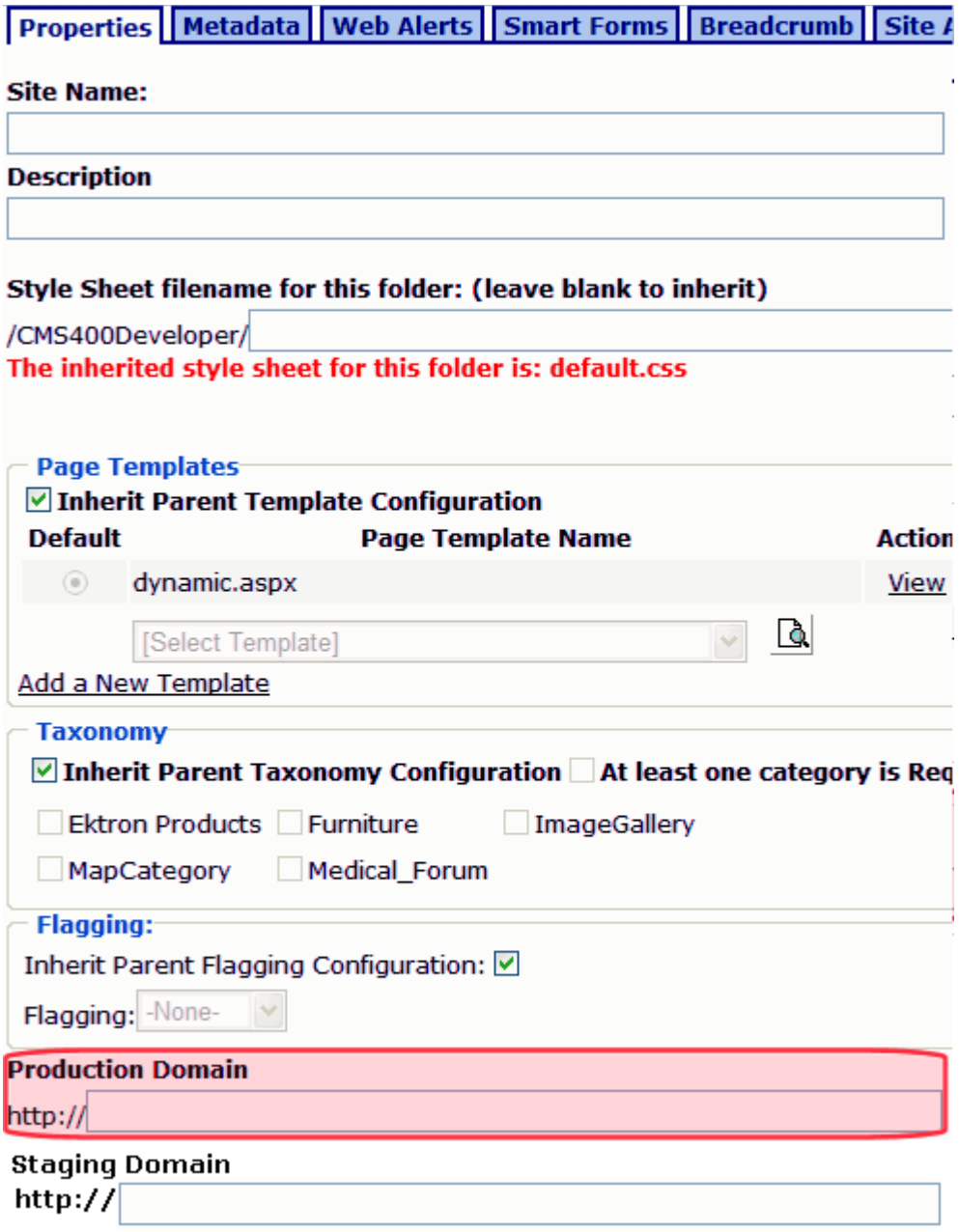
6. In the **Wildcard application maps** area, click **Insert**.
7. The Application Extension Mapping screen appears.



8. Browse to `C:\WINDOWS\Microsoft.NET\Framework\v2.0.50727\aspnet_isapi.dll`.
9. Uncheck the **Verify that file exists** check box.
10. Click **OK**.

Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET

1. In the **Ektron CMS400.NET** Workarea, click **Content**. Each site folder must reside within the site root folder.
2. Create a new top-level site folder for each site by clicking **New** > **Site**.
3. Assign site folder properties as you did for the root folder.
4. The Multi-site Configuration fields appear on the lower section of the screen (illustrated below).



5. In the **Production Domain** field, insert your domain.

6. If you want library links to refer to the staging server domain, as opposed to the production server domain, enter the staging server domain in the **Staging Domain** field. *See Also:* "Setting up Staging Multi-sites" on page 1368
7. Save the screen.

   Within **Ektron CMS400.NET**, the new domains are indicated by a globe icon.

Web Alert Feature

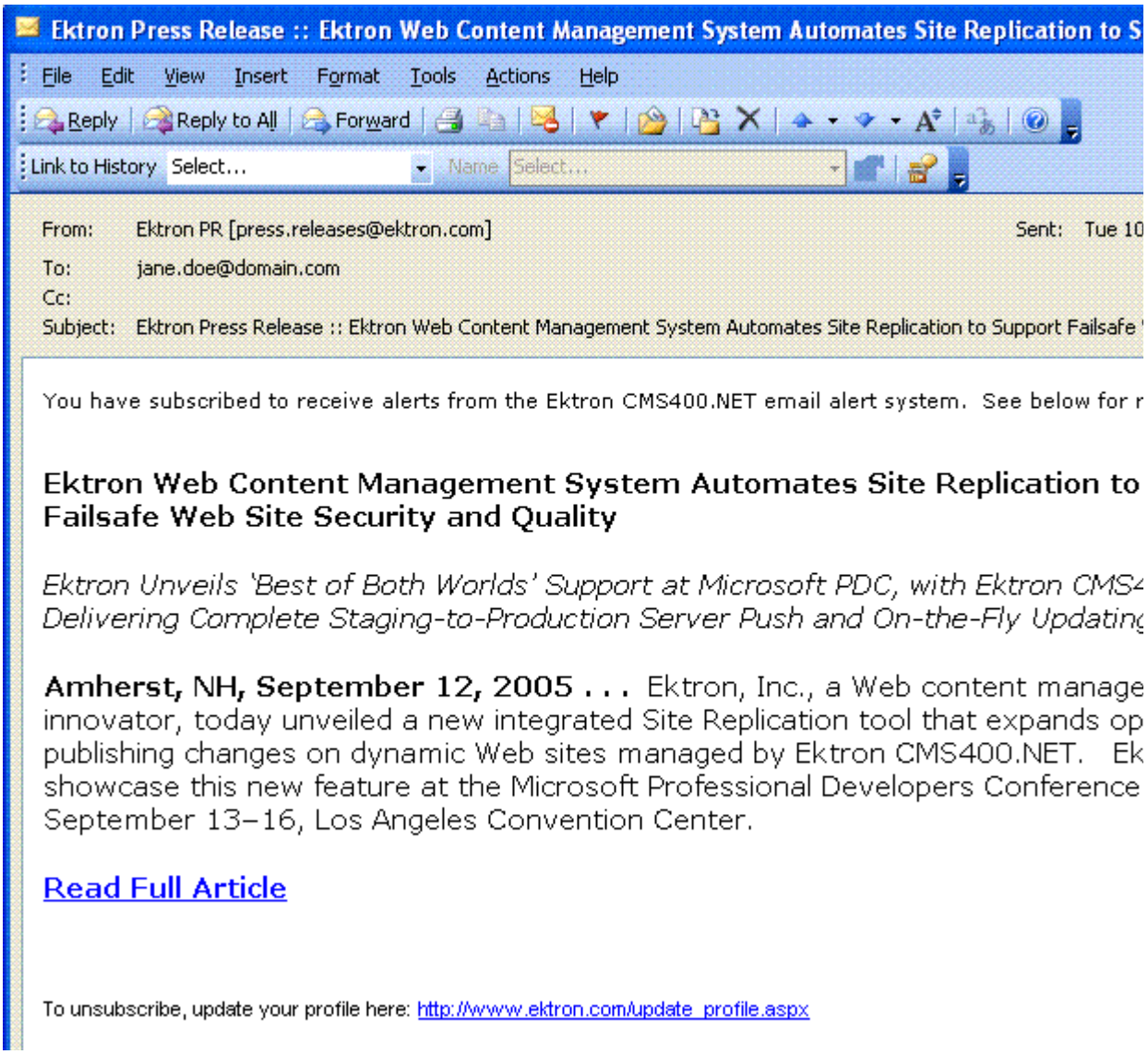
The Web Alert feature enables **Ektron CMS400.NET** to generate email for a list of registered users whenever new content appears on your site, or existing content is updated.

For example, anyone may register to be notified when new information about your product is published. As soon as a page is published on your site, registered users receive an email announcement with a link to the new/updated page. The recipient clicks the link to immediately access the page.

As a result, a self-selected group of users can be instantly notified of changes on your Web site relating to their interests. Once the system is set up, you don't need to do anything -- everything happens in the background.

NOTE Only members of the Administrator User Group and users identified on the Manage Members for Role: Folder User Admin screen can work with Web Alerts.

Sample Web Alert email


Ektron Press Release :: Ektron Web Content Management System Automates Site Replication to S
File Edit View Insert Format Tools Actions Help
Reply Reply to All Forward
Link to History Select... Name Select...
From: Ektron PR [press.releases@ektron.com] Sent: Tue 10
To: jane.doe@domain.com
Cc:
Subject: Ektron Press Release :: Ektron Web Content Management System Automates Site Replication to Support Failsafe
You have subscribed to receive alerts from the Ektron CMS400.NET email alert system. See below for r
Ektron Web Content Management System Automates Site Replication to Failsafe Web Site Security and Quality
Ektron Unveils 'Best of Both Worlds' Support at Microsoft PDC, with Ektron CMS4 Delivering Complete Staging-to-Production Server Push and On-the-Fly Updating
Amherst, NH, September 12, 2005 . . . Ektron, Inc., a Web content manage innovator, today unveiled a new integrated Site Replication tool that expands op publishing changes on dynamic Web sites managed by Ektron CMS400.NET. Ek showcase this new feature at the Microsoft Professional Developers Conference September 13–16, Los Angeles Convention Center.
Read Full Article
To unsubscribe, update your profile here: http://www.ektron.com/update_profile.aspx

This chapter explains the Web Alerts feature through the following topics.

- "How Web Alert Works" on page 1023
- "Server Configuration" on page 1024
- "Enabling the Web Alert Feature" on page 1026

- ”Setting Up the Message Queue and Asynchronous Processor” on page 1027
- ”Creating the email Message” on page 1036
- ”Defining Subscriptions” on page 1043
- ”Assigning Web Alert Information to Folders and Content” on page 1046
- ”How Users Sign up for Subscriptions” on page 1053

See Also: ”Using eSync with Web Alerts” on page 1369

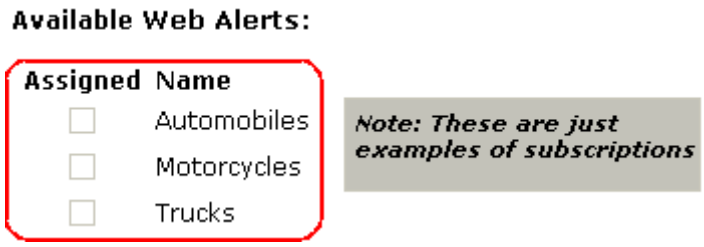
How Web Alert Works

The following explains how Web Alert email works.

1. Content is published.
2. **Ektron CMS400.NET** checks the **This is a staging server** checkbox on the Settings > Configuration > Application Setup screen. If it is unchecked, proceed to the next step. If the box is checked, no Web alerts will be issued for this server.
3. **Ektron CMS400.NET** checks to see if any subscriptions are assigned to the folder or content. (Subscriptions can be assigned at the folder or content level.)

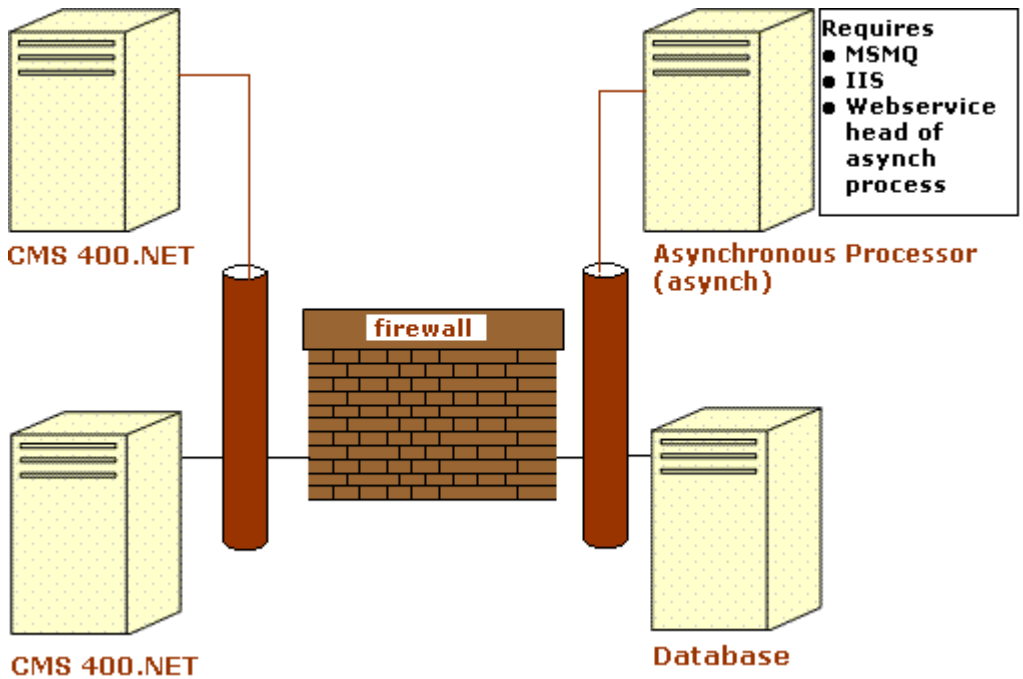
   If no subscriptions are assigned, the **Web Alerts** tab does not appear when editing content.
4. If any subscription is assigned, **Ektron CMS400.NET** checks to see if an email should be created for this content. The settings appear under **Web Alerts** tab.

   For example, some content only triggers an email when it is first published, while other items always generate an email.
5. If an email should be generated, **Ektron CMS400.NET** builds the email content by retrieving information from fields on the Folder Properties screen. These are identified under the **Web Alert Contents** section of the Web Alerts tab.
6. **Ektron CMS400.NET** determines which subscription lists should receive the email. These are identified on the **Available Web Alerts** area of the Web Alerts tab. Each list contains the email address of every subscribed user.



Server Configuration

The following illustration depicts a typical Web server configuration you would use with the Web Alerts feature.



- **Firewall** - the **Ektron CMS400.NET** business tier must have Web access to the asynchronous server. The business tier maintains the CMS files. This configuration enables proper communication between **Ektron CMS400.NET** and the asynchronous processor.

  - The asynchronous processor must have port 25 (SMTP) access to a valid mail server to send emails

- The mail server (omitted from the illustration) must be allowed to send out port 25 (SMTP) traffic and can be on the Async server

- **Queuing** - Message queuing must be installed on the Async server.

  You must create a message queue on the Async machine and record its name. The message queue is specified in the exe.config file for the service, and in the web.config file for the Web Service interface.

- **CMS** - The web.config file includes a key for the location of the asynchronous processor. This needs to be verified as working.

- **Other** - IIS must be installed on the asynchronous processor. IIS allows a Web service call to schedule a file download and send commands.

  Ektron recommends that the Async machine only allow HTTP traffic from **Ektron CMS400.NET** servers. This provides additional security on the Async processor.

Verifying Connections

- You can verify the Web service > queue connection by

  - leaving the Ektron asynchronous processor service off, submitting content with notifications, and verifying that a message arrived in the queue

  - turning on journaling for the queue. Submit a message in the queue. The Ektron asynchronous processor service picks it up and places it in the journaled messages.

  - turning on logging for the Ektron asynchronous processor service

- To verify the CMS > Web service connection, open the asynchronous processor location inside a Web browser and test the Web services.

  To verify the writing of files, ensure that **Ektron CMS400.NET** has write access to the `[sitepath]subscriptions` directory and submit content that will trigger notifications. This action places a file inside that directory.

- To verify that the Ektron asynchronous processor service can download a file, open a Web browser on the Async machine and connect to the location of the notification command files. Attempt to download one.

Enabling the Web Alert Feature

Enabling the Web Alert feature involves the following steps.This section explains each step in detail

Step	Description	For more information, see
1. Set up message queue and asynchronous processor.		”Setting Up the Message Queue and Asynchronous Processor” on page 1027
2. Create messages.	Define components of the email to be sent to subscribers.	”Creating the email Message” on page 1036
3. Define subscriptions.	Categories of information on your site. Site visitors can subscribe to be notified when content in a category is added or updated.	”Defining Subscriptions” on page 1043
4. Assign Web Alert information to folders and content.	Assign Web Alert information to folders and content items which, when published, trigger emails. For each folder or content item to which you assign subscriptions, determine • activities that trigger emails (for example, only upon initial publication of content) • the content of the email • the subscription list(s) to whom the email is sent	”Assigning Web Alert Information to Folders and Content” on page 1046
5. Create and publish site visitor registration page.	Create a new Web form and drop the membership server control onto it. Then, publish that form on your Web site. Note: This task is typically done by a developer.	Developer’s Manual > “Introduction to Ektron CMS400.NET Server Controls “> “Membership Server Control”
6. Site visitors subscribe to lists of interest.	Someone signs up to be notified when changes in a selected subscription (category) are published on your Web site.	”How Users Sign up for Subscriptions” on page 1053
7. CMS users can also subscribe.		”CMS User Subscription Sign Up” on page 1058

Step	Description	For more information, see
8. Subscribers are automatically notified when content is updated.	Web content is either first published or updated. If at least one subscription is assigned to the content or its folder, email is sent according to pre-defined criteria for the folder.	

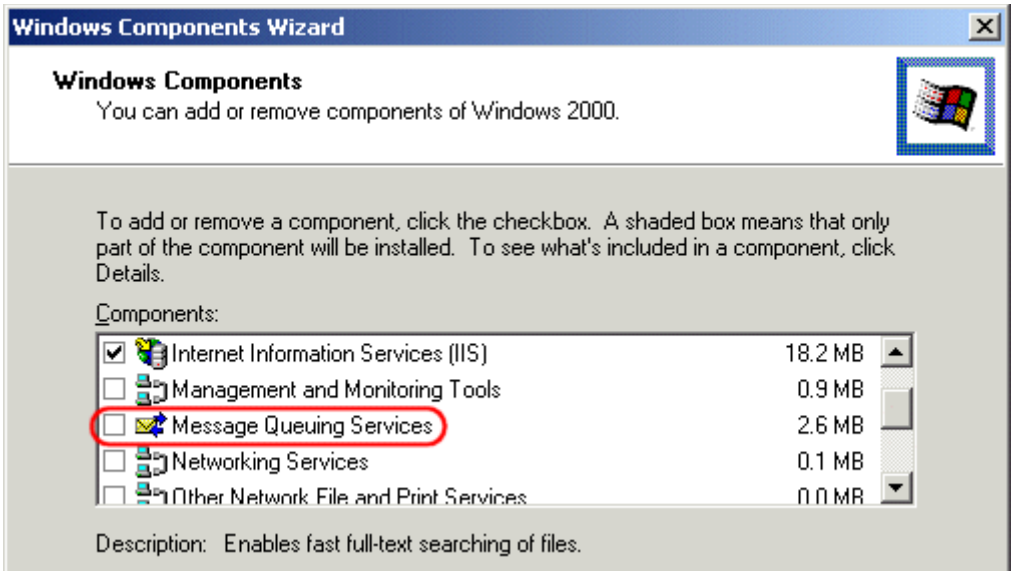
Setting Up the Message Queue and Asynchronous Processor

After installing **Ektron CMS400.NET** version 5.1 or higher, you need to set up the Microsoft Message Queuing and the Ektron Asynchronous Processor. It is assumed that the following directories and files are installed on your server:

- `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\EktronAsyncProcessor_Service\`
- `C:\inetpub\wwwroot\`*`your site root`*`\bin\EktronAsyncProcessorWS.dll`
- `C:\inetpub\wwwroot\`*`your site root`*`\Workarea\webservices\EktronAsyncProcessorWS.asmx`

NOTE If you need to move Web services file, use the **Asynchronous Processor Location** field in the Configuration > Setup screen to specify the new folder location.

1. On the server that hosts **Ektron CMS400.NET**, go to **Control Panel > Add/Remove programs > Add/Remove Windows Components**.
2. If it is not checked, check **Message Queuing Services**.


Windows Components Wizard
Windows Components
You can add or remove components of Windows 2000.
To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details.
Components:
Internet Information Services (IIS) 18.2 MB
Management and Monitoring Tools 0.9 MB
Message Queuing Services 2.6 MB
Networking Services 0.1 MB
Other Network File and Print Services 0.0 MB
Description: Enables fast full-text searching of files.

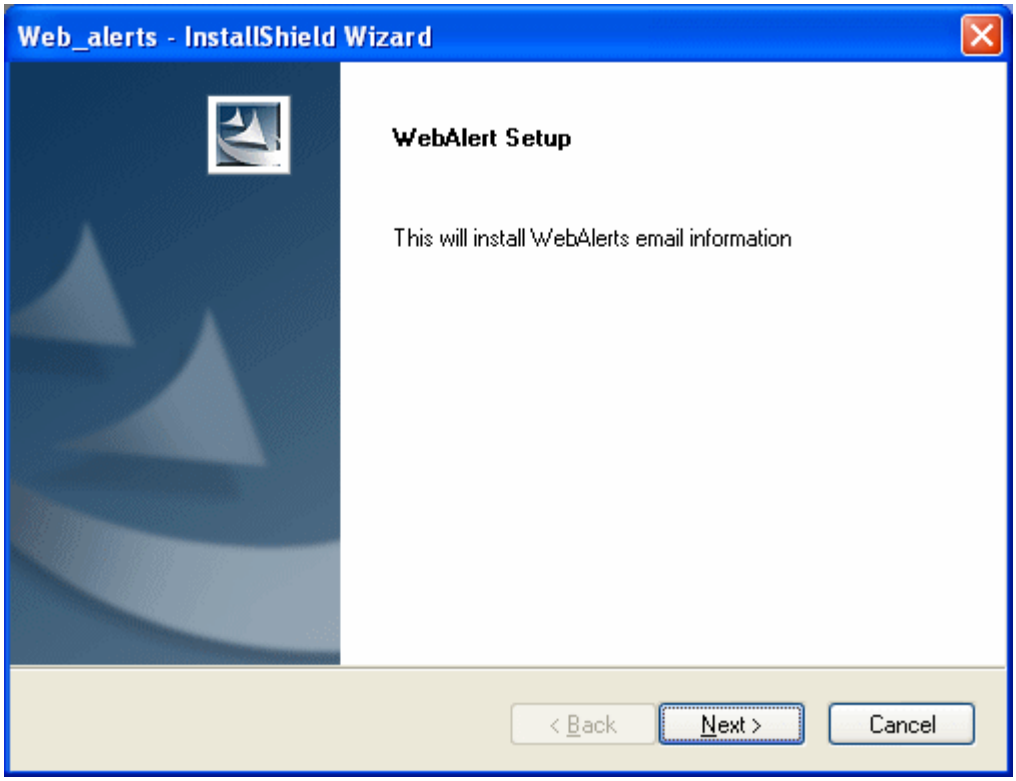
NOTE On Windows 2003, it is within the Application Server Components group.

3. If **Message Queuing Services** was checked when you viewed it, go to step 4.

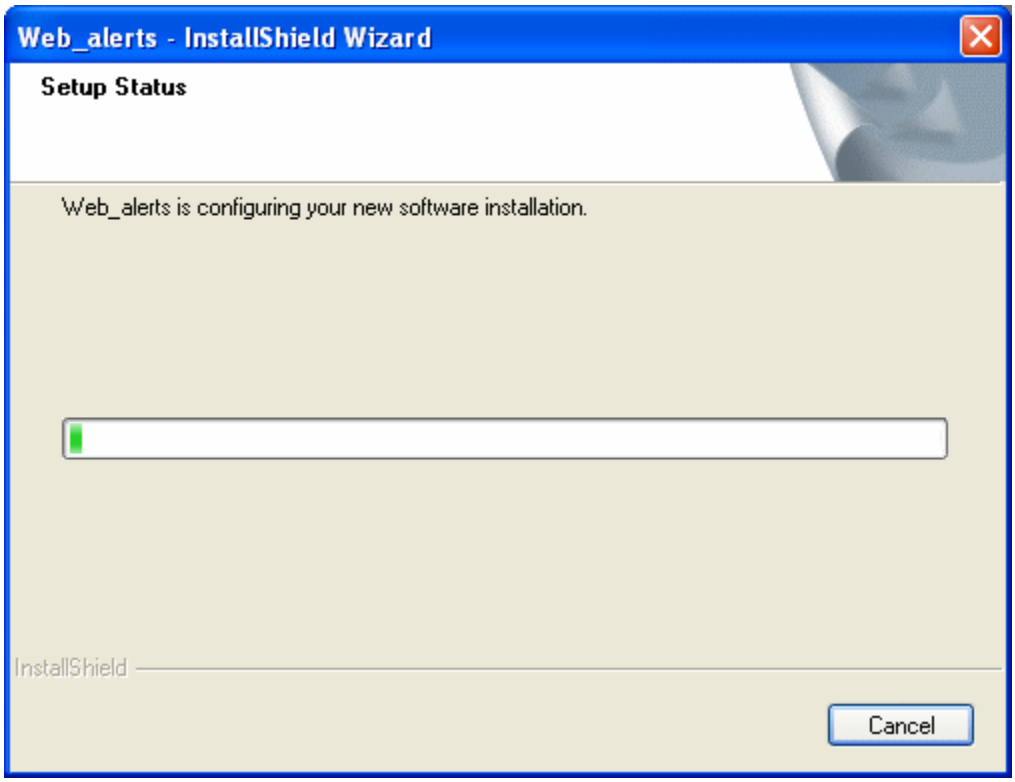
   If it was not checked, click **Next**. A wizard creates the component.

NOTE The rest of this procedure employs a wizard that saves you several manual steps. If you have a problem using the wizard, or prefer to install Web Alerts manually so you can track the files being installed to your server, see "Manual Steps for Setting up the Message Queue and Asynchronous Processor" on page 1033.

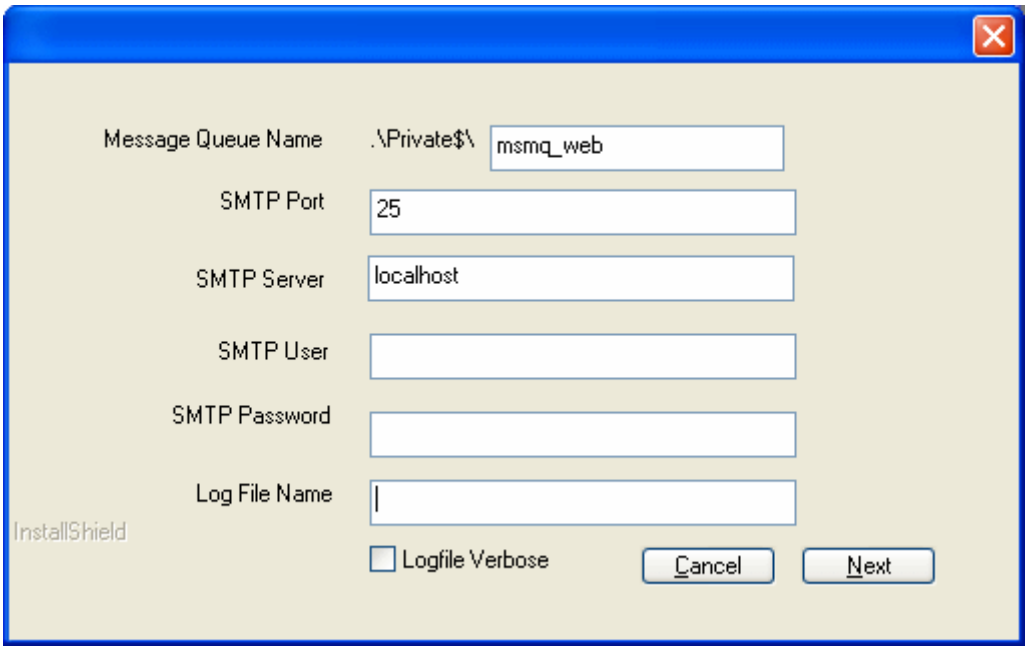
4. From the Windows Start Menu, click **All Programs > Ektron > CMS400 > Utilities > Web Alerts Setup**.
5. The Web Alert Wizard setup screen appears.



6. Press **Next**. The wizard begins installing the Web Alerts feature.

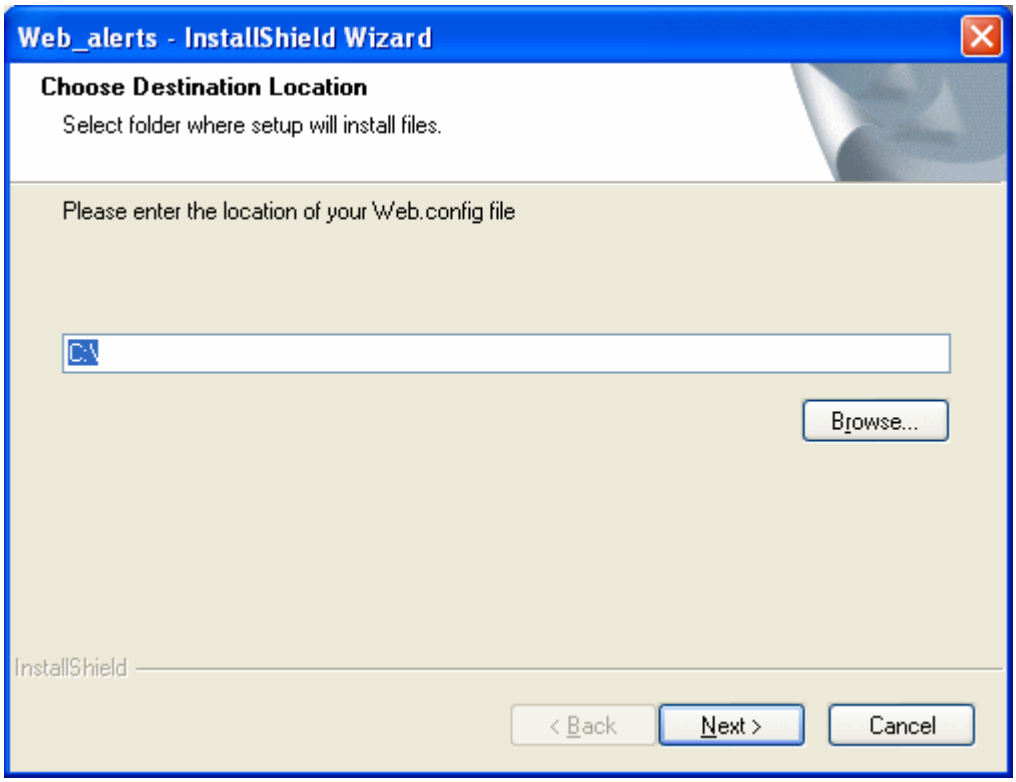


7. The following screen appears.

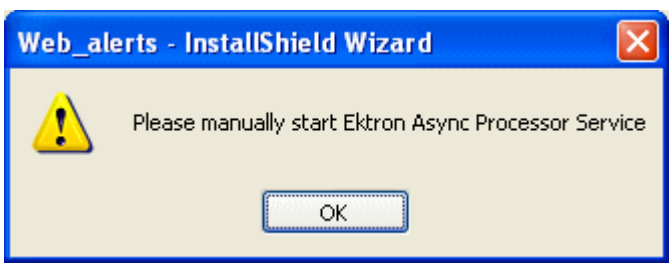


8. Enter the username and password that will be used to send and receive email.
9. At the **Log File Name** field, enter the name of the file that will track Web Alert activities. If you enter nothing, the file is named listener.log.

   The file resides in the `C:\Program Files\Ektron\CMS400`*`versionnumber`*`\EktronAsyncProcessor_Service` folder. It is also available from the Workarea. See "Asynchronous Log File Reporting" on page 1035.
10. If you want a very detailed log file, click **Logfile Verbose**.
11. Press **Next**. The following screen appears.



12. Either insert or browse to the folder that contains your web.config file. This is your site root folder. Then press **Next**.
13. If your Asynchronous Processor service is not running, the following message appears.

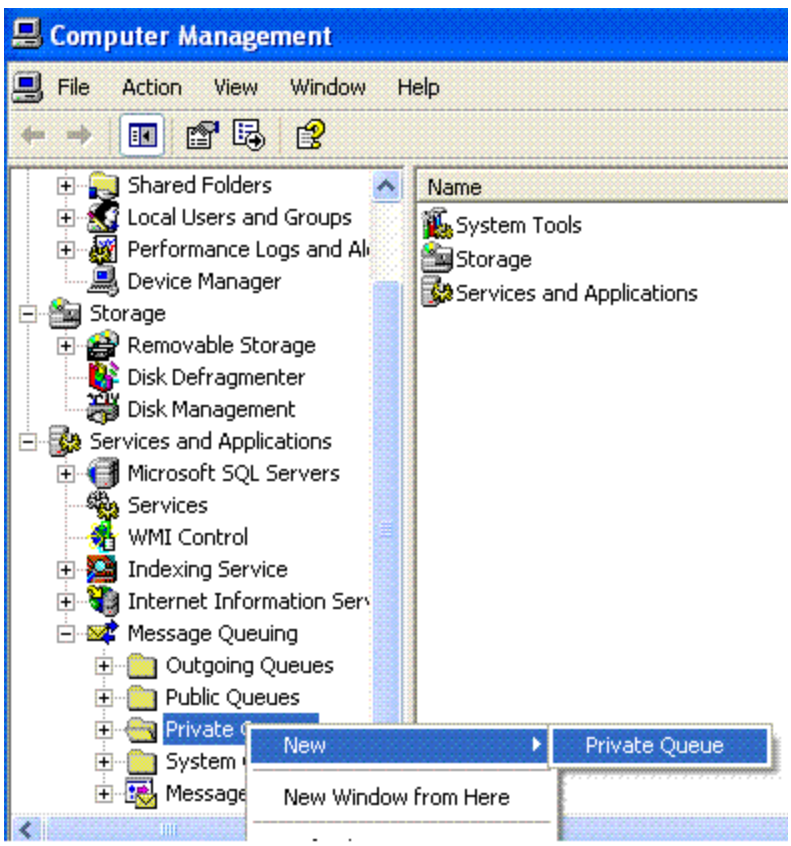


14. If you see this message, press **OK** then click **Finish**.
15. Go to **Control Panel > Administrative Tools > Computer Management > Services and Applications > Services**. Start the Ektron Async Processor Service.

Manual Steps for Setting up the Message Queue and Asynchronous Processor

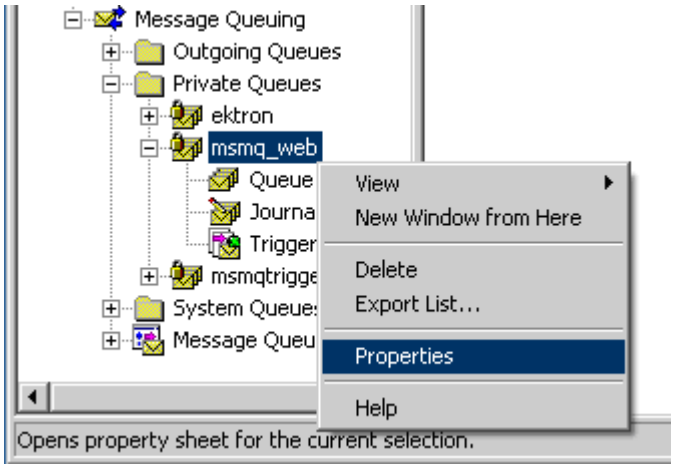
This section describes manual steps for setting up the Message Queue and Asynchronous Processor. You can use this procedure if you had a problem using the wizard, or you want to know which files are being installed to your server.

1. Go to **Control Panel > Administrative Tools > Computer Management > Services and Applications > Message Queuing**.
2. Right click the Private Queues folder and select **New > Private Queue**.



3. Create a private queue named `msmq_web`.

4. Right click `msmq_web` and select Properties.



5. Go to the **Security** tab. You can give the Everyone group Full Control if you are in a testing environment. If you are on a production server or want better security, give the local system account (the account which the EktronAsyncProcessor Service runs as) the following permissions:

   •Delete

   •Receive Message

   •Peek Message

   •Send Message

   Give the ASP.NET account (the account that the Web services interface runs as) Send Message permission.

6. Click **OK**.

7. Open the following file:

   ```
   C:\Program Files\Ektron\CMS400v52\EktronAsyncProcessor_Service\RegEktron.Services.EktronAsyncProcessor.bat
   ```

8. Review and update as necessary the paths to the .NET directory and `Ektron.Services.EktronAsyncProcessor.exe` file.

WARNING! Update the paths to the .NET Directory and the .exe file if necessary.

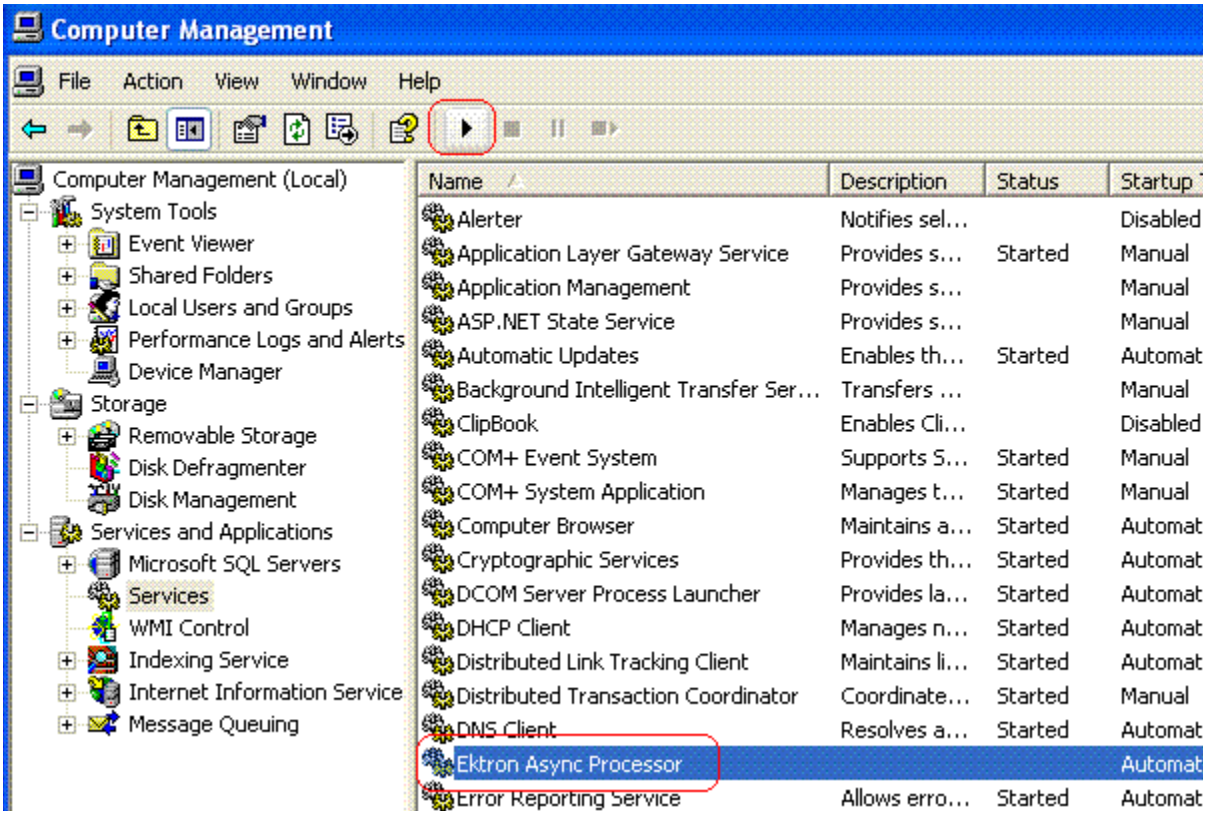
9. Execute the .bat file.

   Or, from a command line or **Start Menu > Run**, enter:

   ```
   C:\Windows\Microsoft.NET\Framework\v2.0.50727\installutil "C:\program
   ```

`Files\Ektron\CMS400v75\EktronAsyncProcessor_Service\Ektron.Services.EktronAsyncProcessor.exe`"

10. Open the following file and enter your SMTP connection settings: `C:\Program Files\Ektron\CMS400v75\EktronAsyncProcessor_Service\Ektron.Services.EktronAsyncProcessor.exe.config`.
11. Go to **Control Panel > Administrative Tools > Computer Management > Services and Applications > Services**. Start the **Ektron Async Processor** Service.



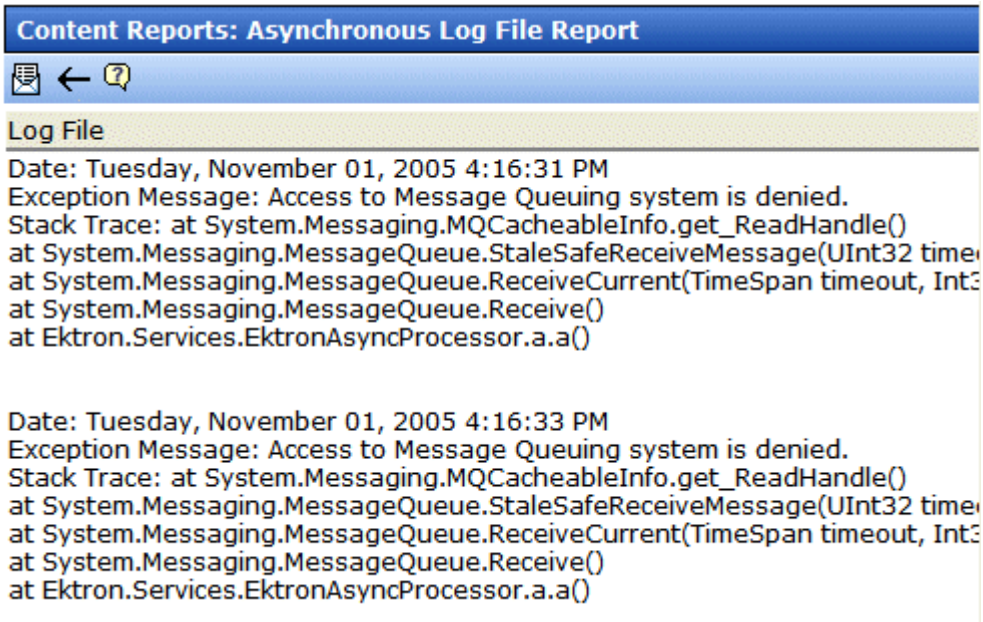
Asynchronous Log File Reporting

Once the Message Queuing and Asynchronous Process are set up and running, you can access a log report about the Asynchronous process. This report shows any problems with the Asynchronous Processor.

In addition to viewing the report, you can email it to any CMS400.NET user. See "emailing Reports" on page 154.

To access the Asynchronous Process log, follow these steps.

1. In the **Workarea's Smart Desktop**, click the Reports folder.
2. Click the Asynchronous Log File link.
3. Any problems appear on the screen.


Content Reports: Asynchronous Log File Report
Log File
Date: Tuesday, November 01, 2005 4:16:31 PM
Exception Message: Access to Message Queuing system is denied.
Stack Trace: at System.Messaging.MQCacheableInfo.get_ReadHandle()
at System.Messaging.MessageQueue.StaleSafeReceiveMessage(UInt32 time
at System.Messaging.MessageQueue.ReceiveCurrent(TimeSpan timeout, Int3
at System.Messaging.MessageQueue.Receive()
at Ektron.Services.EktronAsyncProcessor.a.a()
Date: Tuesday, November 01, 2005 4:16:33 PM
Exception Message: Access to Message Queuing system is denied.
Stack Trace: at System.Messaging.MQCacheableInfo.get_ReadHandle()
at System.Messaging.MessageQueue.StaleSafeReceiveMessage(UInt32 time
at System.Messaging.MessageQueue.ReceiveCurrent(TimeSpan timeout, Int3
at System.Messaging.MessageQueue.Receive()
at Ektron.Services.EktronAsyncProcessor.a.a()

Creating the email Message

This section has the following topics.

- "Predefining Message Components" on page 1036
- "Combining Message Components to Create the Message" on page 1040
- "Previewing the email Message" on page 1041

Predefining Message Components

Before you can create an email message, define the following information.

- default message text
- opt out message
- unsubscribe message
- “from” address

You can define as many as you want of each item. You must, however, define at least one opt-out message, unsubscribe message, and “from” address to use the Web Alert feature.

These message components are later inserted into an email message that is sent to your subscribers. *See Also:* ”Creating the email Message” on page 1036

Creating Default Message Text

You can create one or more default messages to contain the text of the email. A simple editor lets you apply some XHTML formatting the message.

Including Variables in the Default Message

The default message can include variables that retrieve information about the content and display it in the message text. The variables are surrounded by at signs (@). For example

```
The following content was recently updated: @AppContentLink@
```

In the email, this text might read:

```
The following content was recently updated: The Effect of Coumadin
on Cardiac Patients
```

You can use the following variables in the body of a Web Alert message.

Variable	Displays this information in the email
@appContentTitle@	The title of the content block.
@appCRLF@	A carriage return. Moves the text down one line.

Variable	Displays this information in the email
@appContentLink@	The link to the content block on the Web site. Note: You must be logged in to see the changes.
@appContentURL@	The URL of the content, from the quicklink and domain.
@appSubscriptionNames@	Comma separated list of subscriptions that a user selected.
@appComment@	The comments for the content block.
@appSubmitterFirstName@	The first name of the user who submitted the content block.
@appSubmitterLastName@	The last name of the user who submitted the content block.

To create default message text, follow these steps.

1. In the Workarea, go to **Settings > Configuration > Web Alerts > Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the message.
4. At the **Type** field, select **DefaultMessage**.
5. In the editor, enter the message text.
6. Click the Save button ( ).

Creating Opt Out Message Text

An Opt-Out message appears as the first line of every email. It directs the reader to the Unsubscribe message at the bottom. Here is an example:

```
You have subscribed to receive alerts from the Ektron CMS400.NET
email alert system. See below for removal instructions.
```

You can add variables to the Opt Out text. *See Also:* ”Including Variables in the Default Message” on page 1037

To create Opt-Out message text, follow these steps.

1. Go to **Settings > Configuration > Web Alerts > Messages**.
2. Click the Add button ( ).
3. Enter a title that describes the Opt-Out message.
4. At the **Type** field, select **OptOut**.
5. In the editor, enter the message text.
6. Click the Save button ( ).

Creating Unsubscribe Message Text

An Unsubscribe message lets the person receiving the email remove himself from the subscription list.

You can add variables to the Unsubscribe text. *See Also:* "Including Variables in the Default Message" on page 1037

To create Unsubscribe message text, follow these steps.

1. Go to **Settings > Configuration > Web Alerts > Messages**.
2. Click the Add email Message button ( ).
3. Enter a title that describes the Unsubscribe message.
4. At the **Type** field, select **Unsubscribe**.
5. In the editor, enter the message text.
6. Click the Save button ( ).

Creating "From" Addresses

Any email generated by the Web Alert feature must have a "from" address. To create one or more "from" addresses, follow these steps.

1. Go to **Settings > Configuration > Web Alerts > Email From List**.

2. Click the Add email From Address button ( ).
3. Enter an email address that will be used in the From field of messages generated by the Web Alert feature.
4. Click the Save button ( ).

Combining Message Components to Create the Message

You create the content of an email message by configuring the following components. Some are required. Then, when content is published, **Ektron CMS400.NET** retrieves the field values to create the email Web Alert.

NOTE To set or modify this information, you must have permission to edit the folder.

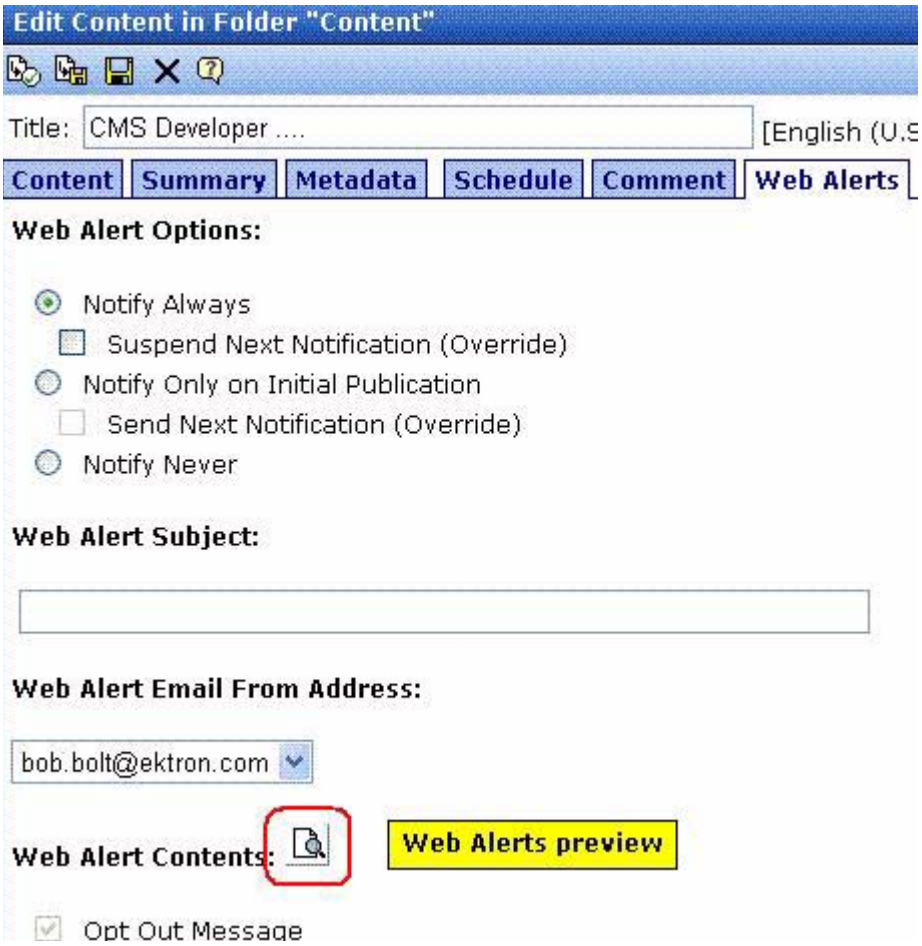
Component	Comment	Required?
1. Subject line	Plain text you enter on the Web Alerts tab of the Folder Properties screen	No
2. From address	See "Creating "From" Addresses" on page 1039	Yes
3. Opt out message	See "Creating Opt Out Message Text" on page 1038	Yes
4. Default message	See "Creating Default Message Text" on page 1037	No
5. Content Summary	The Summary of the content item whose creation or change generates the email. Note: The Summary can include variables that retrieve information about the content item. See "Including Variables in the Default Message" on page 1037	No

Component	Comment	Required?
6. Any CMS content item	Identify CMS content to include within the email content. • To identify an existing content item, click **Select** next to the **Use Content** checkbox. Then, navigate to the content item. Note: If the content item is an Office document or a managed file, a *link* to that item appears within the email message, not the item itself. • To insert this content item (that is, the one whose creation or change triggers this Web Alert), click **Use Current**. • To create a new content block to insert into this message, click **Select** next to the **Use Content** checkbox. When the folder navigation window appears, click the Add Content button ( ). Then, see "Adding HTML Content" on page 80.	No
7. Unsubscribe message	See "Creating Unsubscribe Message Text" on page 1039	Yes

The elements appear within the email in the sequence shown above.

Previewing the email Message

You can preview the email message at any time by clicking the preview button, which appears to the right of the **Web Alert Contents:** label on the Web Alerts tab (see below).



The button appears on the Web Alerts tab for folders as well as content.

When you click the preview button, a new window displays the body of the email message. (The components used in an email message are listed in "Combining Message Components to Create the Message" on page 1040.)

After previewing the message, you can change any message components and click the button again to review the updated message. You don't need to save or check in the content to update the preview.

Defining Subscriptions

Create a subscription for each type of information site visitors might want to be notified about. For example, if your site sells electronics, you could set up one subscription for televisions, another for computers, and a third for stereo equipment. Site visitors can then subscribe to appropriate areas of interest.

CMS and membership users can also sign up for subscriptions.

To create one or more subscriptions, follow these steps.

1. Go to **Settings > Configuration > Web Alerts > Subscriptions**.
2. Click the Add Subscription button (shown below).

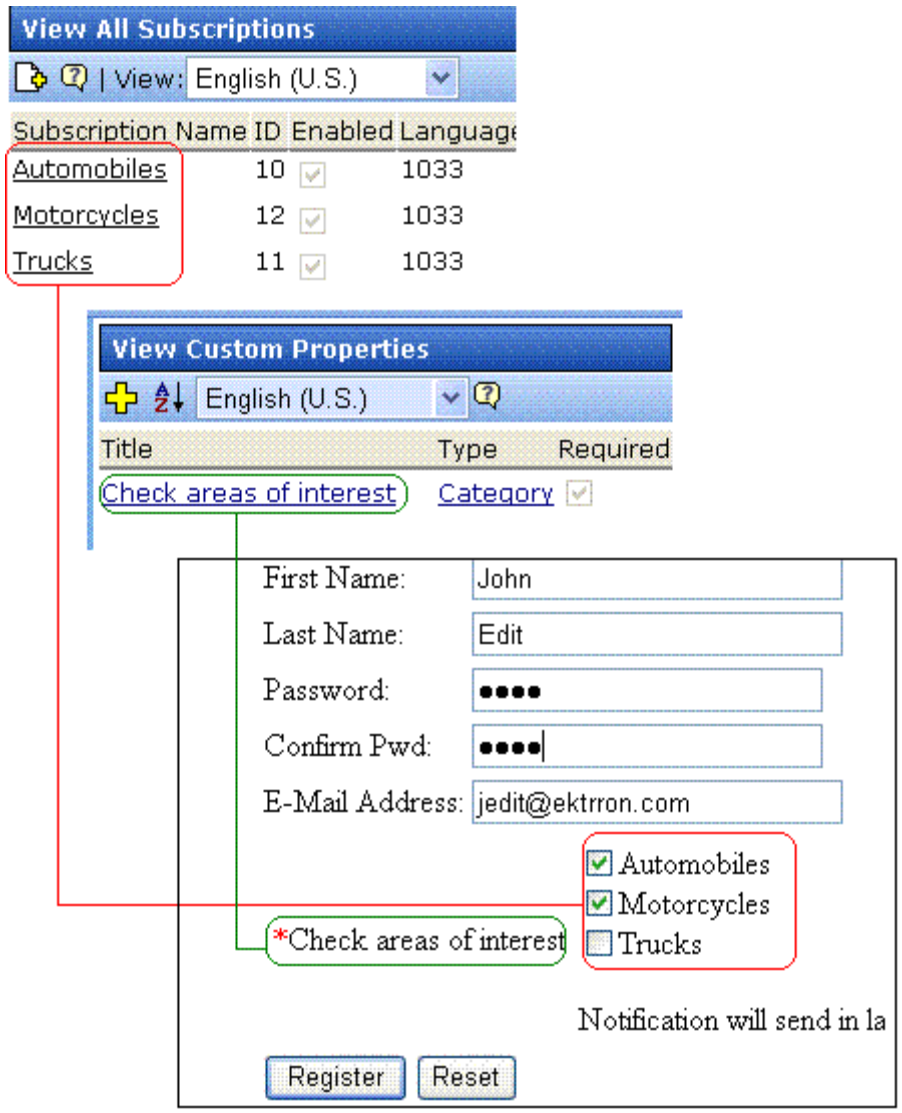
3. Enter a name for the subscription. The name should indicate the kind of information that it will cover.
4. Use the **Enabled** check box to indicate if the subscription is currently active.
5. Press the Save button ( ).

Effect on Custom User Properties

When you create the first subscription, a new entry is automatically created in the Custom User Properties screen. By default, its name is **Subscriptions**, and its type is **Category**. This occurs because all custom user properties appear on the Site Visitor Registration screen. In this way, users visiting that page can select areas of interest about which to be notified when content is updated.

The default name (**Subscriptions**) appears on the Site Visitor Registration screen. You may want to change it to something more helpful, such as **Select Areas of Interest**. To do this, select the Subscriptions entry and edit the **Label** field in the Custom User Properties screen.

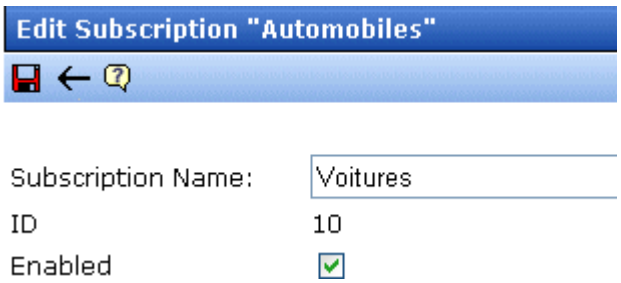
The following graphic illustrates the relationship among the Subscriptions, Custom Properties, and Site Visitor Registration screens.



If you add more subscriptions later, they have no effect on the **Subscriptions** entry in the Custom User Properties screen -- that single entry covers all subscriptions.

Using Subscriptions in a Multi-Language System

When you create a subscription, a version of it is created for every enabled language in your system. You can edit the subscription name and **Enabled** values for any language but the ID number cannot be changed.



To translate any subscription, follow these steps.

1. Go to **Settings** > **Configuration** > **Subscriptions**.
2. From the View Languages dropdown list, select the language into which you want to translate the subscription.
3. Click the subscription that you want to translate.
4. Click the Edit button ( ).
5. Enter the translation for the subscription name. If desired, you can check or uncheck the **Enabled** checkbox. Only enabled subscriptions appear on the Site Visitor Registration screen.
6. Click the Save button ( ).

Assigning Web Alert Information to Folders and Content

After creating predefined messages (as explained in "Predefining Message Components" on page 1036) and subscriptions (as explained in "Defining Subscriptions" on page 1043), you need to identify which folders include content that, when updated, trigger a Web Alert. For example, new product announcements are placed in the Marketing folder.

NOTE In order to set or modify Web Alert information, you must have permission to edit the folder.

For each folder, you can assign the following kinds of message information.

- whether Web Alert information is *inherited* from a parent folder or customized
- whether a folder's Web Alert information is inherited by all content items in the folder
- *when* email is sent: always, only on initial publication, or never
- the *content* of the Web Alert email
- the subscriptions assigned to the folder. These determine which recipients receive email when content in this folder is created or updated.

Customizing Web Alert Information for a Folder

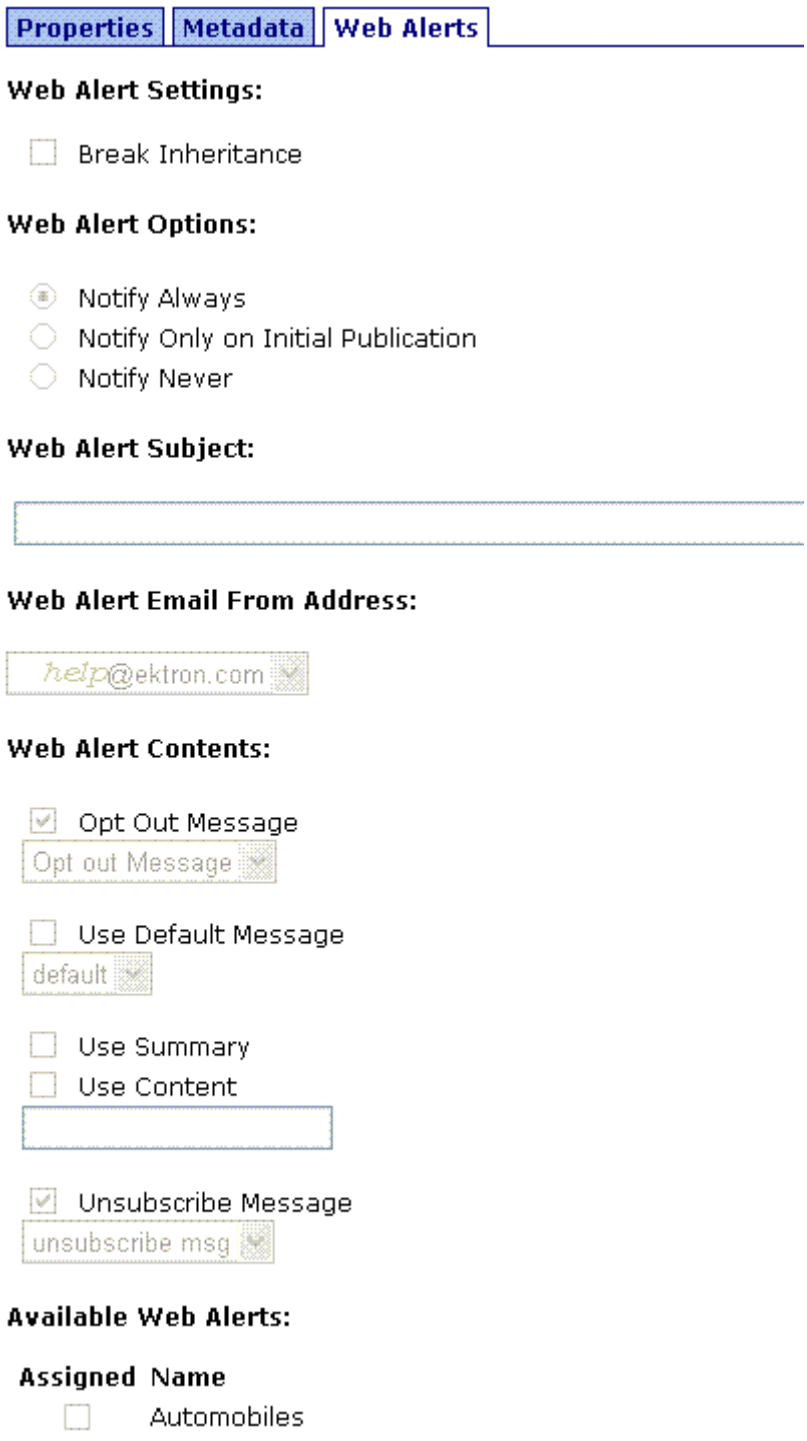
Like other folder-level information in **Ektron CMS400.NET**, Web Alert information is inherited from a parent folder. By default, all folders inherit these settings from the root (Content) folder.

However, inheritance can be broken and customized at any folder level or even the content level. Breaking inheritance means that custom settings can be made at any folder level. Subsequent changes to Web Alert settings at the parent level are ignored.

See Also: "Assigning Web Alert Information to Content" on page 1050

To view, enter, or modify folder-level Web Alert information, follow these steps.

1. Navigate to the folder whose Web Alert information you want to edit.
2. Click **View > Folder Properties**.
3. Click the **Web Alerts** tab.
4. Scroll down to view the Web Alert options.


Properties
Metadata
Web Alerts
Web Alert Settings:
Break Inheritance
Web Alert Options:
Notify Always
Notify Only on Initial Publication
Notify Never
Web Alert Subject:
Web Alert Email From Address:
help@ektron.com
Web Alert Contents:
Opt Out Message
Opt out Message
Use Default Message
default
Use Summary
Use Content
Unsubscribe Message
unsubscribe msg
Available Web Alerts:
Assigned
Name
Automobiles

5. To change any value, click the Edit Properties button ( ).
6. The following table describes the fields.

Web Alert Fields

Field Group	Description
Web Alert Settings: Break Inheritance	To inherit Web Alert settings (described below) from this folder's parent folder, leave this box (**Break Inheritance**) empty. To assign custom Web Alert settings for this folder, check this box and use the fields below to customize the settings.
Web Alert Options	Check *when* Web Alert emails are sent as content in this folder is published. • **Notify Always** - send email whenever any content is published. It doesn't matter if the content is being published for the first time or being updated. • **Notify only on Initial Publication** - send email the first time content is published. After that, email is not sent. • **Notify Never** - email is never sent for content in this folder.
Web Alert Subject	Enter the subject line of the email.
Web Alert email From Address	Select the address of the person from whom the email will be sent. *See Also:* "Creating "From" Addresses" on page 1039
Web Alert Contents	Check any or all of the following components to determine the text of the email. *See Also:* "Combining Message Components to Create the Message" on page 1040 • OptOut Message - see "Creating Opt Out Message Text" on page 1038 • Use Default message - see "Creating Default Message Text" on page 1037 • Use Summary - include the content summary in the email • Use Content - see "Any CMS content item" on page 1041 • Unsubscribe message - See "Creating Unsubscribe Message Text" on page 1039 The components appears within the email in the order listed above.

Field Group	Description
Available Web Alerts	All enabled subscriptions set up in the Subscriptions screen appear. Check those to be notified when content in this folder is added or updated. *See Also:* "Defining Subscriptions" on page 1043 Note: If you uncheck all subscriptions, you disable the Web Alert feature for this folder and all of its content. This applies even if unique subscription information has been assigned to content items within the folder.

Assigning Web Alert Information to Content

You can customize Web Alert settings for any content item. If you do, you break the inheritance from its folder. This means that any subsequent changes to the folder settings do not affect the content's Web Alert settings. From then on, its settings are independent of the folder's settings.

See Also: "Web Alert Feature" on page 1021

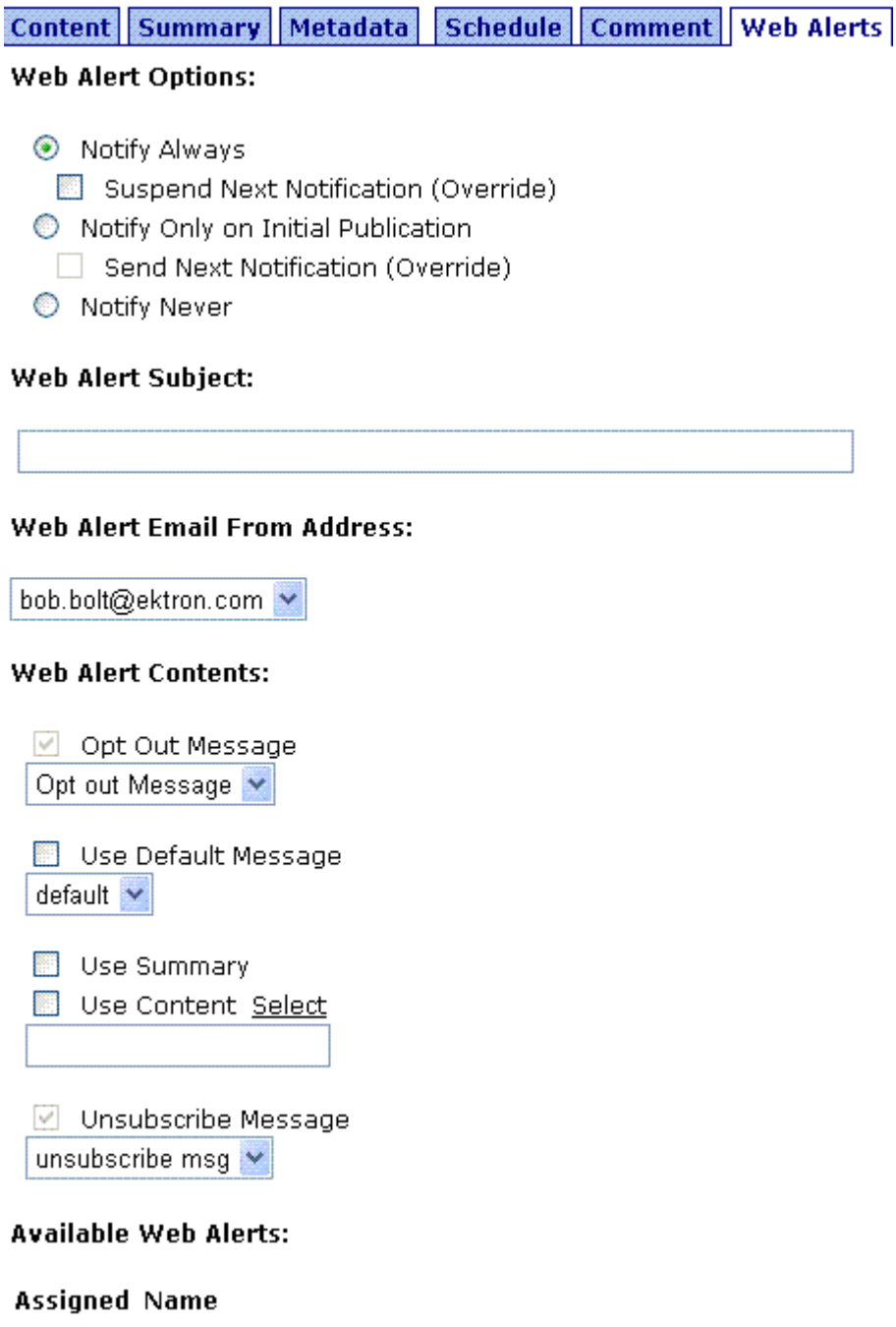
EXCEPTION! If *all subscriptions* are unchecked for a folder, the Web Alert feature is disabled for all content in the folder. This applies even if unique Web Alert information has been assigned to content.

To customize the Web Alert settings for any content item, follow these steps.

1. Navigate to the folder that contains the content.
2. Click the content. The View Content screen appears.
3. Click the Edit button ( ).
4. Click the **Web Alerts** tab.

NOTE The Web Alerts tab only appears if required messages, "from" email addresses, and at least one subscription are assigned to the content's folder.

5. The Web Alert settings for the content appear.



The following table describes the settings.

Field Group	Description
Web Alert Options	Check *when* Web Alert emails are sent as this content is published. • **Notify Always** - send email whenever content is published. It doesn't matter if the content is being published for the first time or being updated. • **Suspend Next Notification (override)** - Check this box if you want to suspend the next email to be sent for this content. You might use this feature is you notice a small error in the content and don't want to notify all subscribers that the page was updated. **Important**! - This setting only applies until the next time this content is published. When that happens, this box is automatically unchecked. • **Notify only on Initial Publication** - send email the first time content is published. After that, email is not sent. • **Send Next Notification (override)** - Send an email to all subscribers the next time this content is published. Use this checkbox to send a one-time mailing to all subscribers about content that has already been published. **Important**! - This setting only applies until the next time this content is published. When that happens, this box is automatically unchecked. • **Notify Never** - email is never sent when content in this folder is published.
Web Alert Subject	Same as for a content folder. See "Web Alert Subject" on page 1049
Web Alert email From Address	Same as for a content folder. See "Web Alert email From Address" on page 1049
Web Alert Contents	Same as for a content folder. See "Web Alert Contents" on page 1049
Available Web Alerts	Only Web Alerts assigned to the folder appear. Check ones that you want to assign to this content item. For more information, see "Available Web Alerts" on page 1050.

Inheriting Content-Level Web Alert Information from Its Folder

If you customized Web Alert information for content items and later decide to standardize that information for all content in a folder, use the Restore Web Alert Inheritance toolbar button ( ).

This button copies folder-level Web Alert information to every content item in the folder, replacing whatever content-level information exists. In this way, all content in a folder will have the same Web Alert information.

How Content that is Dragged and Dropped is Handled

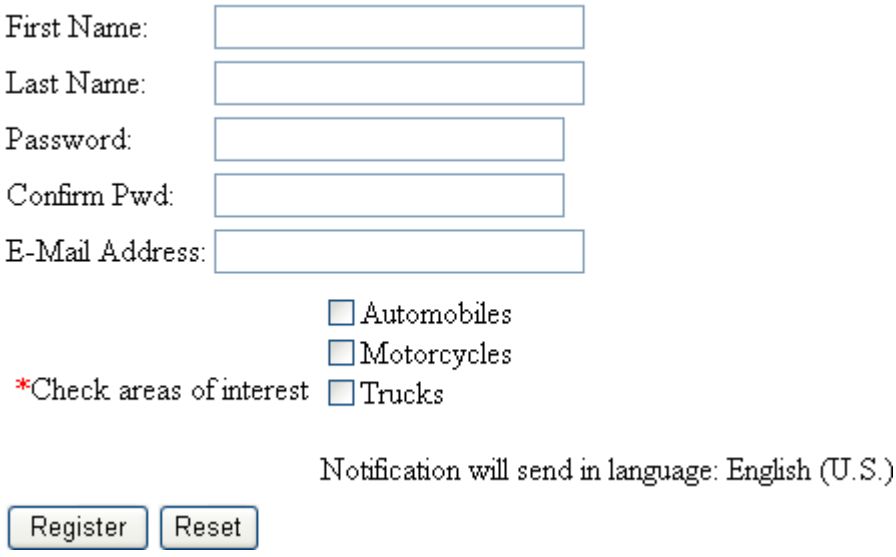
Web Alert emails are not generated for files that are dragged and dropped into **Ektron CMS400.NET** and immediately published. To generate email for these files, you must manually publish them.

Like HTML content, these files must reside in a folder for which the Web Alert feature is enabled.

How Users Sign up for Subscriptions

Once subscriptions are set up, you create a page on your Web site to let site visitors subscribe to areas of interest. An example of that page is below.

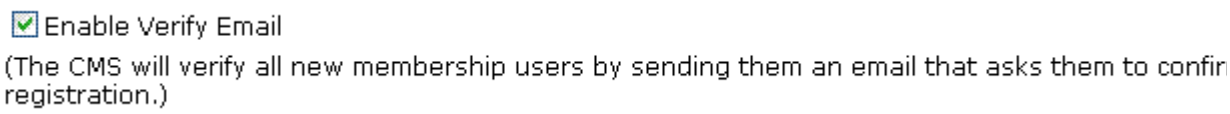
NOTE The email address collected on the screen is used for the membership **Username** field.



To place this form on a Web page, your developer inserts a Membership Server Control. For more information, see the **Ektron CMS400.NET** Developer Manual chapter “Introduction to Ektron CMS400.NET Server Controls” > ”Membership Server Control.”

Any user who subscribes via the above screen becomes an **Ektron CMS400.NET** membership user, and is automatically added to the All Members user group. For more information, see ”Membership Users and Groups” on page 735.

What happens next depends on the **Enable Verify email** check box in the Application Setup screen (shown below).


Enable Verify Email
(The CMS will verify all new membership users by sending them an email that asks them to confir
registration.)

- ”What Happens if Verification email is Not Used” on page 1055
- ”What Happens if Verification email is Used” on page 1055
- ”Setting up Other Web Pages for Site Visitor” on page 1057
- ”CMS User Subscription Sign Up” on page 1058

What Happens if Verification email is Not Used

If the **Enable Verify email** checkbox is *not* checked, everyone who signs up automatically becomes a membership user.

What Happens if Verification email is Used

WARNING! When using the Checkout Server Control on an eCommerce site, the **Enable Verify Email** setting must be unchecked. Otherwise, new users will receive an error message when they sign-up using this control. For information on the Checkout Server Control, see the “eCommerce” > “Checkout Server Control” section in the CMS400.NET Developer Reference Manual

Typically, when managing a self-subscribe list, you want new users to confirm their interest in being on the list. This prevents people from being subscribed by someone else without their permission.

If the **Enable Verify email** checkbox *is* checked, everyone who signs up is placed on the Users Not Verified list. (To see this list, go to **Workarea > Modules > Community Management > Memberships > Users Not Verified**.)

These people then receive an email. You define the content of this email in **Workarea > Modules > Community Management > Messages**. The email should direct the unverified user to a new Web page that asks him to confirm his interest in signing up for the subscription. (See ”The Verification Message” on page 1055.) New users are activated when the subscriber confirms his interest.

To create such a page, your Web developer creates or updates a Web Form using the Membership Server Control. For this purpose, set the control’s **DisplayMode** property to **AccountActivate**.

NOTE Users can also be manually activated or removed via the View Not Verified Users screen. For more information, see ”The View Not Verified Users Screen” on page 1056.

The Verification Message

By default, **Ektron CMS400.NET** supplies a generic message asking the user to confirm his password and directing him to the `acitvatemyaccount.aspx` page on your Web site. If you want to customize that message, follow these steps.

1. Go to **Workarea > Modules > Community Management > Messages**.
2. Click the Add button ( ).
3. Assign a title to the message, such as **Verification Message**.
4. Click to place a check mark in the **Default** box.
5. Enter the text of the confirmation message you want the subscriber to receive. Be sure to place the `@appQueryLink@` variable in the message to create a link to the confirmation page. For example:

```
Welcome to example.com. You have registered to be notified of
updates to our site.

Before we can do this, you need to activate your account. To do so,
please visit @appQueryLink@.
```

The `@appQueryLink@` variable places a link in the message that gets resolved as follows:

```
http://sitepath/workarea/activateuser.aspx?uid=[username]&acc=[accountID]
```

For example:

```
http://www.example.com/Workarea/activateuser.aspx?uid=john.edit@example.com&acc=ce5w84o936477
```

If you want the message to include the user's name and email address, use the following variables to retrieve that information:

•name - `@appEmail@`

•email address - `@appActivateId@`

For example:

```
Your user name is @appEmail@.

Your account id is @appActivateId@
```

The View Not Verified Users Screen

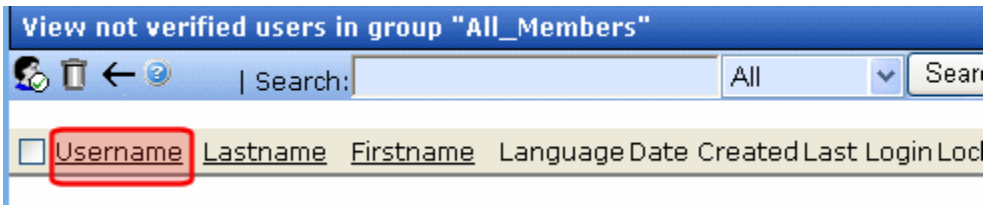
All users who have signed up for a subscription but who have not yet verified that subscription appear on the View Not Verified Users Screen. This screen is available via **Modules > Community Management > Memberships > Users not Verified**.

After viewing membership users on the screen, you can manually activate their account. To do so, selecting one or more users then click the Activate button ( ). Alternatively, you can delete

members by selecting one or more and clicking the Delete button ( ).

NOTE The `ek_PageSize` setting in the web.config file determines the maximum number of users that can appear on a page before it "breaks." When a page breaks, additional entries appear on another screen, and the following text appears near the bottom of the list:
Page 1 of 2
[First Page] [Previous Page] [Next Page] [Last Page]

To select all members, click the check box in the header line, next to **Username** (circled below).



You can also change the way membership users are sorted, or use the **Search** button to find users that match your criteria (for example, users whose username includes *example.com*.) These features are explained in "Sorting Membership Users" on page 742 and "Searching for Membership Users" on page 742.

Setting up Other Web Pages for Site Visitor

You can set up other Web pages that let the subscriber perform the following actions:

- Activate their account
- Reset their password
- Unsubscribe

To create these pages on your web site, place the membership server control on the page. Then use the control's **DisplayMode** property to determine the kind of screen you want to place. For example, to create a screen that lets the user reset his password, set the Membership server control's **DisplayMode** property to **ResetPassword**.

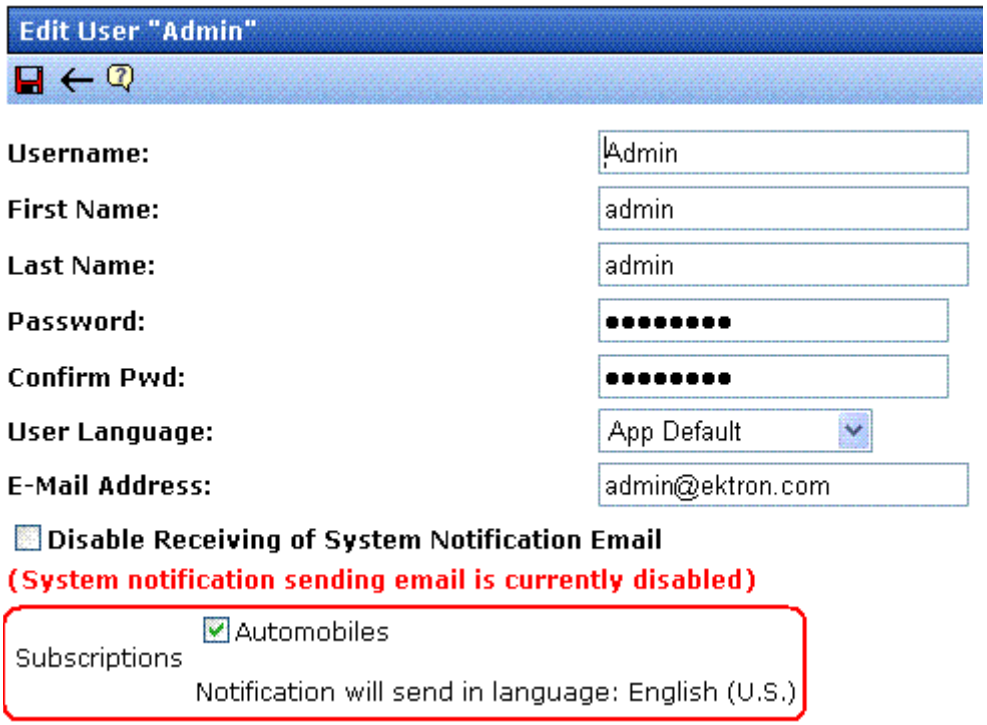
For more information, see the documentation for the Membership server control in the **Ektron CMS400.NET** Developer's Manual.

CMS User Subscription Sign Up

CMS users can also subscribe to any subscription list. This would be particularly useful on an intranet where, for example, employees are notified when job-related information is updated.

Another example would be for your internet site. The manager of the Marketing Department could sign up to be notified whenever Marketing content is added or updated.

To do so, users go to **Settings > User Profile > Edit User** (see illustration).



Ektron Windows Service

Ektron CMS400.NET provides a Windows Service to handle background processing functions. This section explains the service, including

- the CMS functions it performs
- how it propagates updates to the connection string and site path
- where it resides in IIS and the file system
- its activity log

Functions Performed by the Ektron Windows Service

The Ektron Windows Service performs the following processes.

- ”XML Indexing” on page 203
- ”Load Balancing Assets” on page 1070
- ”PDF Generation” on page 319
- ”Bad Links Report” on page 172
- Publication of content scheduled to go live at a future time, and removal of content scheduled to expire. See **Ektron CMS400.NET** User Manual section “Scheduling Content to Begin and End”
- When a new metadata definition is created, the Windows service applies it to all content in the CMS database. However, the metadata definition is only activated for the content when it is enabled for the content’s folder. *See Also:* ”Metadata” on page 118

In addition, the Ektron Windows Service propagates updates made to the database connection string or the site path in the web.config file. The service copies the new value to the

data.config and sitedb.config files (respectively). These are located in `C:\Program Files\Ektron\EktronWindowsservice30`. Any CMS components that reference these values can retrieve the current information from these files.

IMPORTANT! Do not edit the data.config and sitedb.config files. They are dynamically generated by **Ektron CMS400.NET**. If these files have incorrect values, edit the web.config file, which is used to generate them.

Changing the Update Time

The update of the data.config and sitedb.config files occurs once a day at a time prescribed in the `C:\Program Files\Ektron\EktronWindowsservice30\Ektron.ASM.EktronServices.exe.config` file's `updateTime` value. If desired, you can change this time.

Changing the Name of the data.config File

If your server already has a file named data.config, and you want to change the name of the one in `C:\Program Files\Ektron\EktronWindowsservice30` to avoid confusion, follow these steps.

1. Open Ektron.ASM.EktronServices.exe.config.
2. Find this line: `<connectionStrings configSource="data.config"/>`.
3. Replace `data.config` with the new file name. For example: `<connectionStrings configSource="Ektron_data.config" />`
4. Save Ektron.ASM.EktronServices.exe.config.

Changing the http Port

If your Web site is already using port 6060, follow these steps to change the port number used by the Ektron Windows Web Service.

1. Open Ektron.ASM.EktronServices.exe.config.
2. Find this line: `<add key="HttpServicePort" value="6060"/>`.
3. Change the `value` to the port number you will use for the Ektron Windows Service.

Disabling PDF Generation

By default, PDF generation is enabled. If you want to disable it within the Ektron Windows Services configuration file, follow these steps.

1. On the server to which you installed **Ektron CMS400.NET**, open `C:\Program Files\Ektron\EktronWindowsservice30`.
2. Open Ektron.ASM.EktronServices30.exe.config.
3. Find this line:

```
<add name="PdfFileRead"
type="Ektron.ASM.EktronServices.PdfFileManagerRead.PdfFileManagerReadService,
Ektron.ASM.EktronServices20" IntervalSeconds="101" Enabled="true" />
```

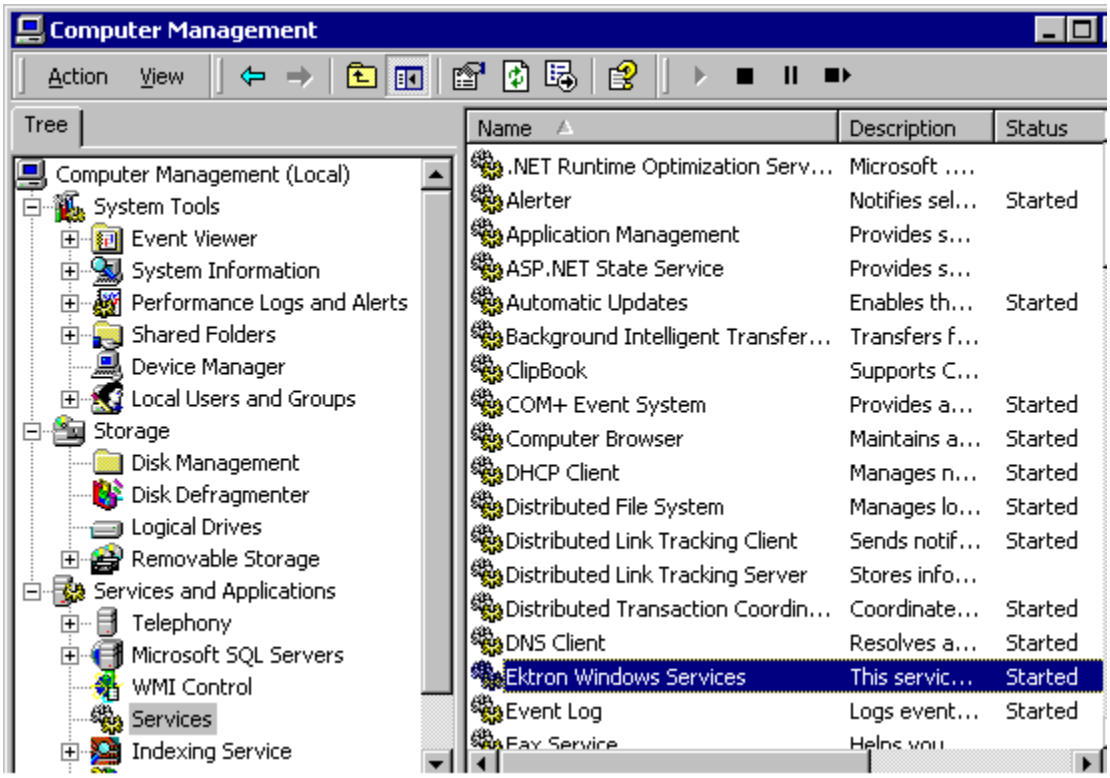
4. Set `enabled` to `false`.

Viewing the Ektron Windows Service

Viewing in IIS

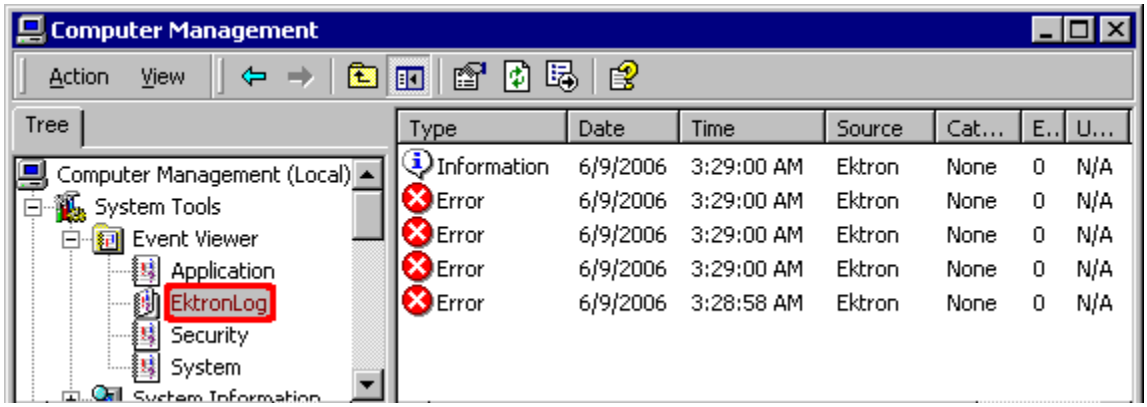
The Windows Service starts automatically when **Ektron CMS400.NET** is installed, and again whenever the server is restarted.

1. To see the status of the service, go to **Computer Management > Services and Applications > Services**.
2. Look for **Ektron Windows Services**. You can see its status in the **Status** column.



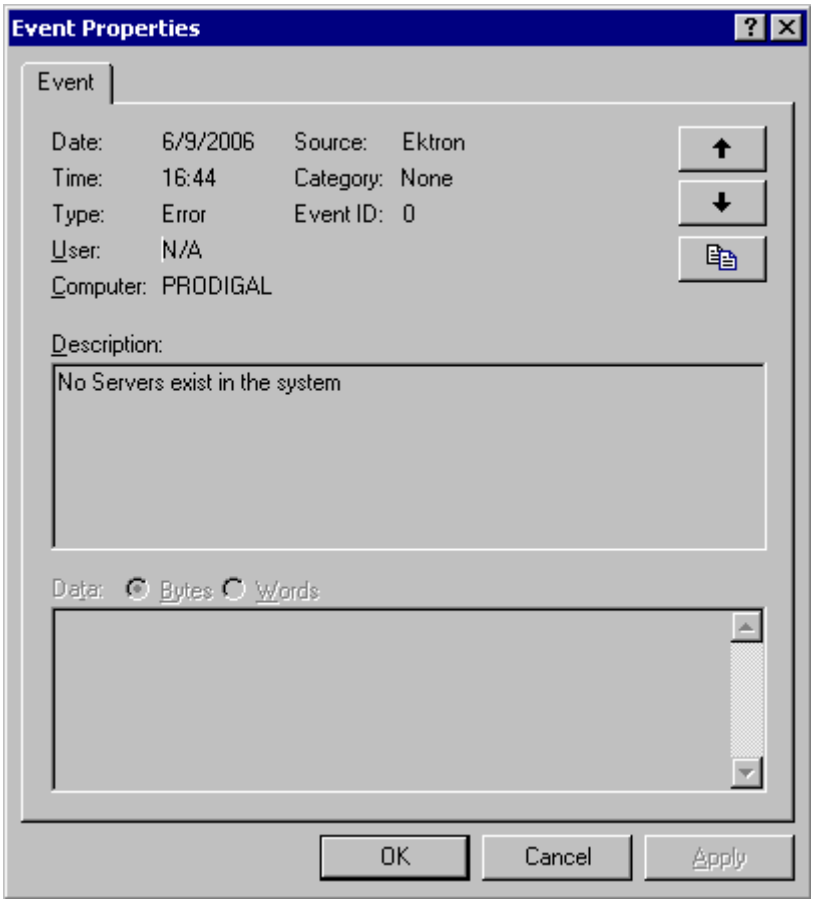
The Activity Log

The service has an Activity Log, which tracks all related events. To see it, go to **Computer Management > System Tools > Event Viewer > Ektron Log**.



To view detail for any event, double click it.

A common source of errors is that the service cannot find **Ektron CMS400.NET** sites, because they have not been created yet, as shown in the sample below.



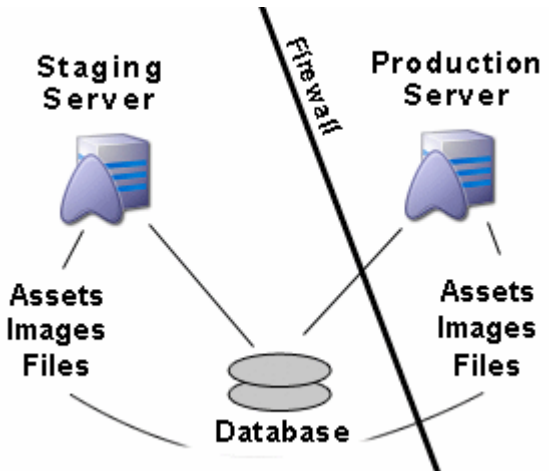
Viewing in the File System

On your file system, the Ektron Windows Service is located in `C:\Program Files\Ektron\EktronWindowsservice30`. Within that folder, the Ektron.ASM.EktronServices.exe.config file runs the Ektron Windows service.

Setting up a Virtual Staging Server

NOTE This section explains how to move individual content items and assets between staging and production servers. If you want to move an entire Web site, use **Ektron CMS400.NET**'s eSync feature. It is documented in "Using eSync" on page 1303.

This section explains how to set up a virtual staging and production server configuration. As you can see below, it consists of two physical servers, with the production server outside **Ektron CMS400.NET**'s Load Balancing feature moves the content and assets from staging to production.



After you set this up, content contributors create, test, and modify content on the staging server. Preview Mode lets everyone view and modify proposed changes on the staging server. No editing is done on the Production server, which is typically located outside the firewall.

Ektron CMS400.NET lets you control the approval process. Once content is approved, the Load Balancing software moves it to the production server, where it is immediately available to site visitors.

NOTE Load Balancing pushes a copy of every content item and asset to the production server. However, content on production only becomes visible to site visitors after it is approved.

The advantages of using a Virtual Staging configuration are

- simplicity of maintaining content
- ability to preview before content is published
- instant publishing to production
- approvals to community data
- staging and production servers share one database
- as library items and assets are updated on the staging server, Load Balancing automatically pushes the changes to the production server

  At the same time, the following information collected on the production server is updated on the staging server:

  - new Blog and Discussion Forum comments
  - Poll/survey results
  - site analytic information
  - assets
  - content rating data

Setting up a Virtual Staging Configuration

Miscellaneous Considerations

- **Login Control** - For **Ektron CMS400.NET** users, editors and approvers, place a login control only on pages that reside on the staging server. This prevents the creation or editing of content on the production server.

  Only membership users should be allowed to log in to the production server.
- **Content Analytics** – disable this feature in the *staging* server's web.config file. (See "Enabling the Content Analytics Feature" on page 934.) If you do not, your usage statistics may be skewed.

- Configure **Web Alerts** on the production server only. When member users receive Web alerts, the link should point to the production server. See "Setting Up the Message Queue and Asynchronous Processor" on page 1027 .
- If you haven't already done so, set up **workflow permissions** for folders on the staging server. See "Setting Approval Chains" on page 786 and "Setting Permissions" on page 776.

Set Up Instructions

Prerequisite:Ektron CMS400.NET Version 7.5 or higher is installed on both servers

1. Install a minimal site on the staging server. During installation, create a database.
2. Install a minimal site on the production server. Do not create a database on the production server.
3. Set up database security that will allow the two servers to read and write to each other.
4. Open the web.config file for both sites.

   - in the staging server's web.config file, copy the section beginning and ending with `<connectionStrings>`

```
<connectionStrings>
    <!--FOR SQLSERVER-->
<add name="Ektron.DbConnection" providerName="System.Data.SqlClient"
connectionString="server=WS10080;database=virtual_test;Integrated Security=False;user=abc;pwd=xyz;" />
</connectionStrings>
```

   - in the production server's web.config file, replace the `<connectionStrings>` tag with the information copied from the staging server

   As a result, both sites reference the same database.

5. Set up library load balancing. See "Load Balancing Library Images and Files" on page 1068. This will ensure that, as items are added or changed in the library on the staging server, they are also added to the production server's library and vice versa.
6. Set up load balancing for your assets. See "Load Balancing Assets" on page 1070. This will ensure that, as assets are added or changed in **Ektron CMS400.NET** on the staging server, they are also updated on the production server and vice versa.

Load Balancing Support

IMPORTANT! **Ektron CMS400.NET**'s Load Balancing Support software requires load balancing equipment to distribute content requests among the servers. You must buy the equipment separately -- it is not provided as part of **Ektron CMS400.NET**.

Load Balancing has two purposes:

- Provides redundancy for your Web site - if one server fails, a second can still handle requests
- Balances requests - distributes requests across multiple servers

To enable load balancing, set up several servers that include the same files. Then, purchase load balancing equipment to evenly distribute content requests among the servers. Whenever an image or file gets uploaded to your Web site, regardless of the Web server the user is working on, the asset is replicated on both servers.

The client browser is unaware that more than one server is involved. All URLs point to a single Web site. The load balance software resolves them.

Ektron provides different strategies for load balancing *library images and files* and *DMS assets*. See

- ”Load Balancing Library Images and Files” on page 1068
- ”Load Balancing Assets” on page 1070

See Also: ”eSync in a Load Balanced Environment” on page 1355

Load Balancing Library Images and Files

Library load balancing is important when your configuration consists of two or more Web sites that share a single database.

Library files are not saved in the database but in the site root folders `uploadedfiles` and `uploadedimages`.

To support load balancing, the library files on all servers must be identical. To maintain this state, whenever a user uploads an item to the library, it must be replicated on all other servers. After following the setup instructions, any image or file added to the library of one server will be copied to the corresponding folder on the other servers in the configuration.

Setting up Library Load Balancing

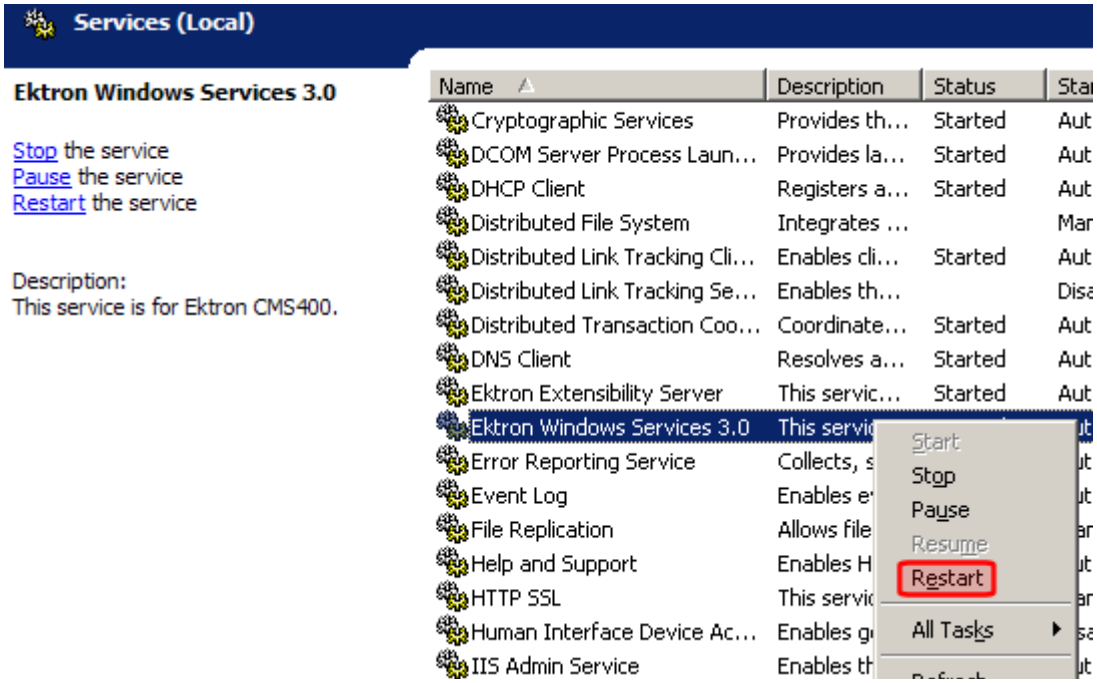
Step 1. Update Assetmanagement.config

1. On the first server in the configuration, open the *`siteroot/`*AssetManagement.config file.
2. Find the `LoadBalanced` property.
3. Set the value to 1.
4. Repeat this step for all other servers in the configuration.

Step 2. Update the Ektron Windows Service File

1. Open `C:\Program Files\Ektron\EktronWindowsService30`.
2. Open Ektron.ASM.EktronServices30.exe.config.
3. Find the `LoadBalanced` property.
4. Set the value to 1.
5. Find the `LibraryLoadBalanced` property.
6. Set the value to 1.
7. Find the `LoadBalServerCount` property.
8. Set to the number of servers in your load balance cluster.

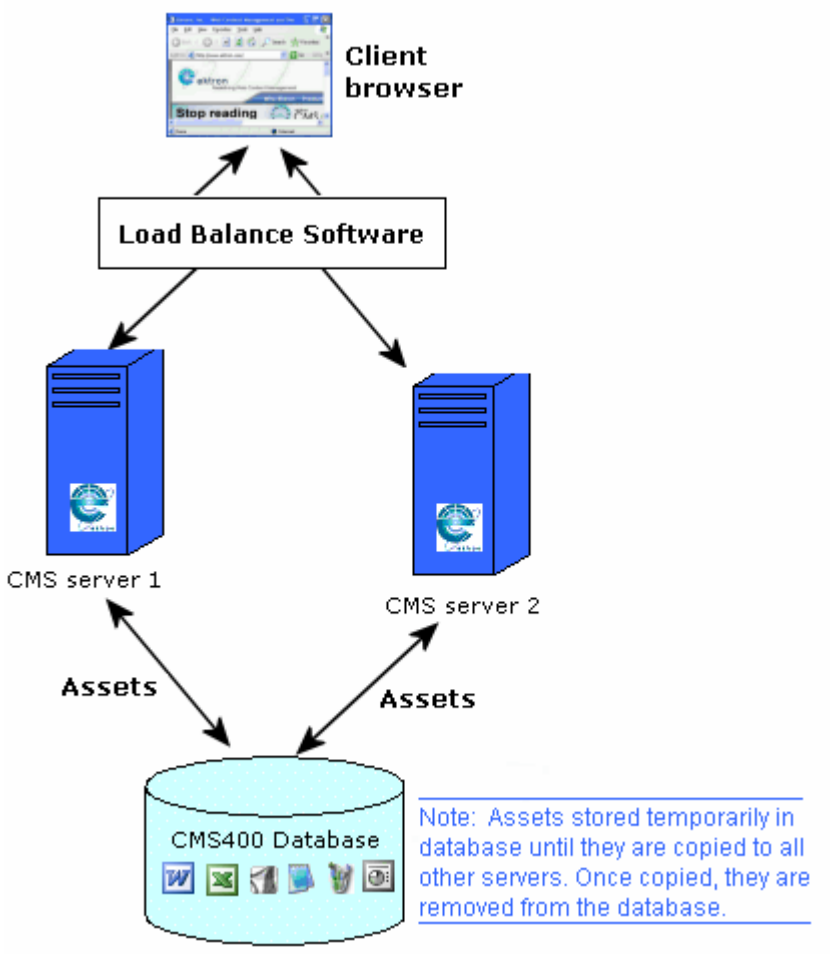
Step 3. Restart the Ektron Windows Service



See Also: "Ektron Windows Service" on page 1059

Load Balancing Assets

Ektron CMS400.NET lets you balance requests to view or work with *assets* among two or more servers. To achieve this, each server has its own copy of every asset.


Client browser
Load Balance Software
CMS server 1
CMS server 2
Assets
Assets
CMS400 Database
Note: Assets stored temporarily in database until they are copied to all other servers. Once copied, they are removed from the database.

To accomplish this, **Ektron CMS400.NET** initially stores every new asset in the database. An Ektron service constantly checks to see if all database assets also exist on each server's file system. To learn about this service, see "Ektron Windows Service" on page 1059.

If an asset does not exist on any server in the cluster, it is copied from the database to the server's file system. Once there, the asset is available for requests to work with it. After an asset is copied to all servers, **Ektron CMS400.NET** removes it from the database.

There is no limit to the number of servers or databases that can be load balanced.

Setting up Asset Load Balancing

To set up load balancing for assets, follow these steps on *both the staging and production server*.

1. Within the site root folder, open the AssetManagement.config file. Change the value of the `LoadBalanced` element to **1**.
2. Open the following file using a word processor such as Notepad

```
C:\Program Files\Ektron\EktronWindowsservice30\Ektron.ASM.EktronServices30.exe.config
```

3. Find the following tag: `<add key="LoadBalanced" value="0" />`. Change the value to 1.
4. Find the following tag `<add key="LoadBalServerCount" value="2"/>`. Make sure the value is set to the number of servers in your load balance cluster. This number must be the same for all servers in the cluster.
5. After updating these files for each server in the load balance cluster, sign on to Ektron CMS400.NET. This action sets up the load balance software in the database.

Web Services

Web Services are reusable software components that can be consumed over the Web by means of standard Internet technologies. Mechanisms exist to publish and discover Web Services on the Web, allowing users to locate and integrate them into their applications.

A Web Service is comprised of one or more methods that expose functionality. A Web Service can be thought of as an Application Program(ming) Interface (API), the one big difference being, consumers can access the service using Simple Object Access Protocol (SOAP) over HTTP.

SOAP is an XML based lightweight protocol that defines the message format for Web Services, which allows heterogeneous systems to communicate with each other in a standard way. Seeing Web Services are based on ubiquitous technologies, they have been quickly accepted for the interchange of data.

For information about implementing Ektron CMS400.NET's Web services support for your Web site, refer to Web Services in the Ektron CMS400.NET Developer's Reference Manual.

email Features

Configuring SMTP Server

For information about configuring Microsoft's SMTP service for your Ektron CMS400.NET Web server, please refer to Configuring Email Notifications, in the Ektron CMS400.NET Setup Manual.

Automatic eMail Notification

Ektron CMS400.NET has an automated email system that sends emails to the proper users when an action has been, or needs to be, performed. Emails are generated when any of the following actions takes place.

email sent to	When content is
Next approver	Submitted to be published
Next approver	Submitted to be deleted
Author	Published to Web site
Author	Declined to be published or deleted

In order for users to be notified of these actions, the following criteria must be met:

- Valid system email address
- Enabled email notification
- User email address
- User email notification enabled

These values are set in the Edit User screen. *See Also:* "Managing Users" on page 721

The Tasks feature also has automatic email notification. For more information, see "Email Notification" on page 385.

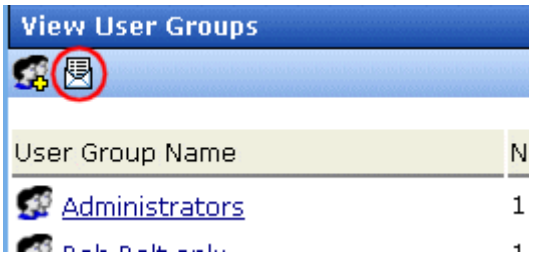
Content of Automatic email

The automatic emails are stored in and received from the database. Each email consists of one string for the subject and one for the body. **Ektron CMS400.NET** does not currently support HTML emails, but the messages are fully customizable. To learn about customizing them, see Customizing **Ektron CMS400.NET** emails in the **Ektron CMS400.NET** Setup Manual.

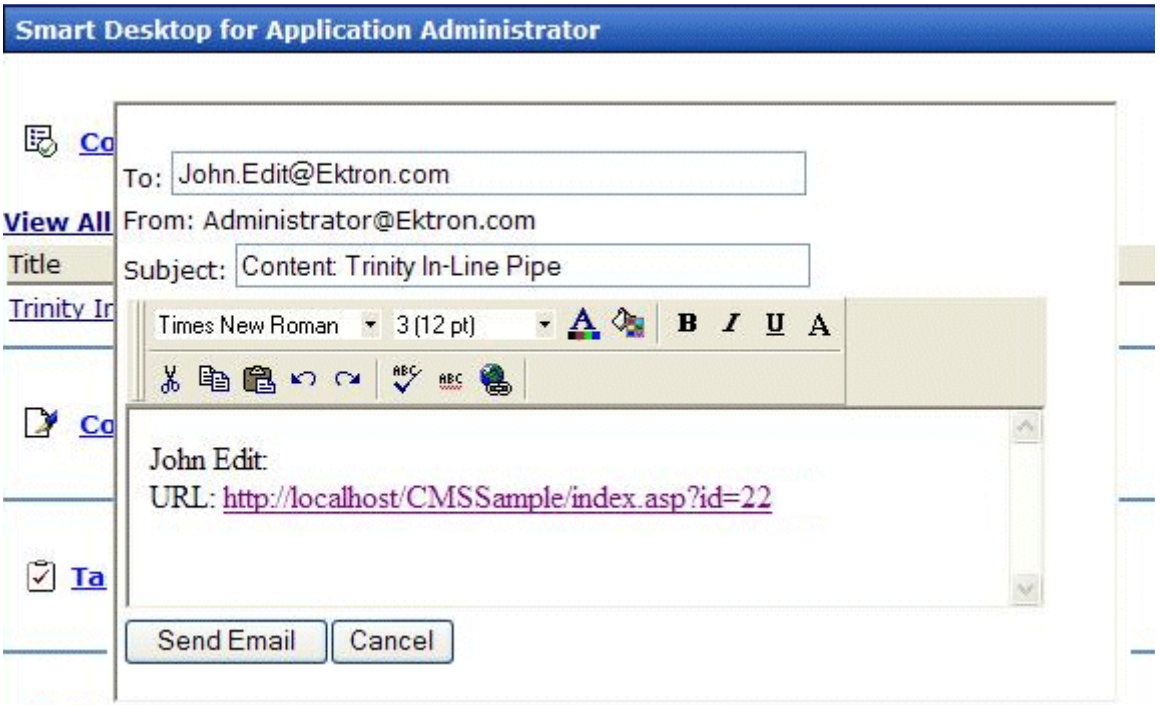
Instant eMail

In addition to automatic email, **Ektron CMS400.NET** lets you send email instantly to a user or user group from many screens. Your ability to send instant mail is indicated by either

- a small mail icon next to a user or group name, as indicated in red below
- a small mail icon on the toolbar (see second image below)



When you click such a user/group name or email icon, the email screen appears, as shown below. Once you complete the screen and click **Send**, an email is sent to designated users.



Conditions for Instant eMail

- The user who is using **Ektron CMS400.NET** must have a valid from email address set up in the user profile. If not, email icons do not appear in **Ektron CMS400.NET**.

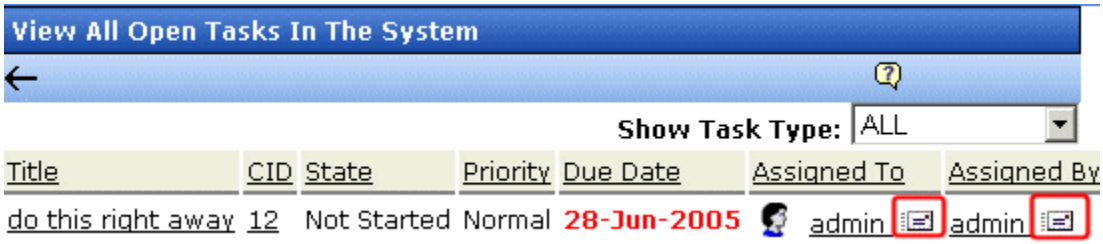
- The email software must be configured for your server. See "Configuring SMTP Server" on page 1074

Where Instant email is Available

Instant email is available from several screens that display users and user groups. Typically, you click a user name or the email icon to launch an email. Screens in the following **Ektron CMS400.NET** features support instant email.

- Smart Desktop
- Tasks
- Approvals
- Reports
- User and user group setup

Wherever instant email is available, an email icon appears (circled in the illustration below).



Modifying Instant eMail

When the email screen appears, the following information is copied from **Ektron CMS400.NET** into the email.

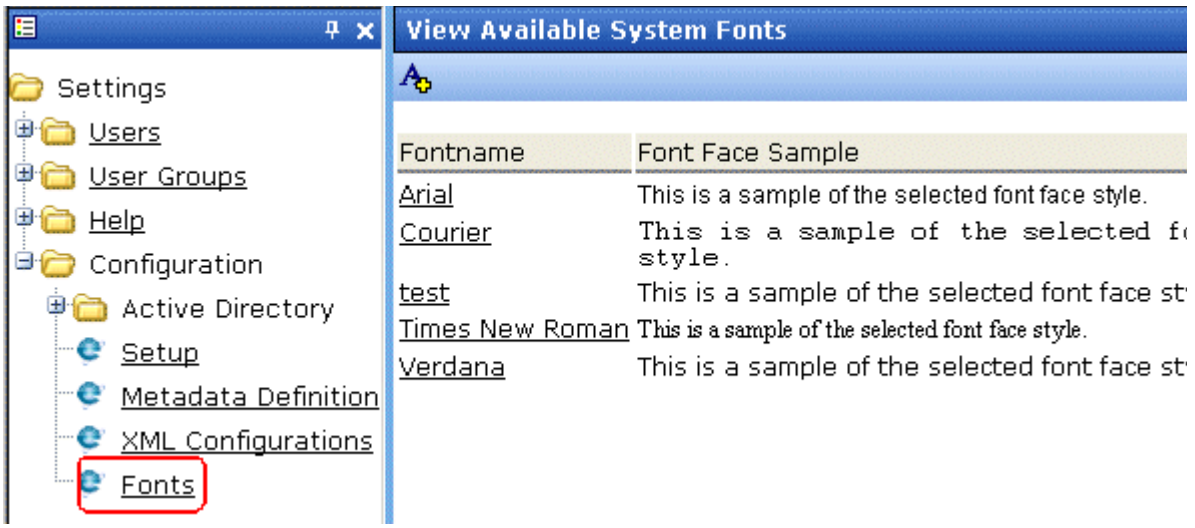
Field	Source of Default Information	Editable?
To	User you selected to receive the email. If the user does not have valid email address, an error message appears. If you then insert a valid email address, the email is sent. If you specify a group to receive the message, as long as one group member has a valid email address, all group members with valid addresses receive the email.	Yes. If desired, you can add recipients by typing them into this field.
From	User who signed on to **Ektron CMS400.NET**.	No
Subject	If the email message is linked to content, its title appears. The screen section below provides an example of content (**Trinity In-Line Pipe**) that is linked to a message.	Yes
Body of message	If the email message is linked to content, a link to the content appears.	Yes

Font Manager

As an administrator, you can add, edit, and delete fonts to and from the Ektron CMS400.NET application. By adding fonts, you are allowing the content contributors to use them when creating content. Administrators can also edit the name of a font, and delete a font from the system.

Minimizing the number of available fonts makes the Web site look more uniform.

Below is the Font Manager screen.



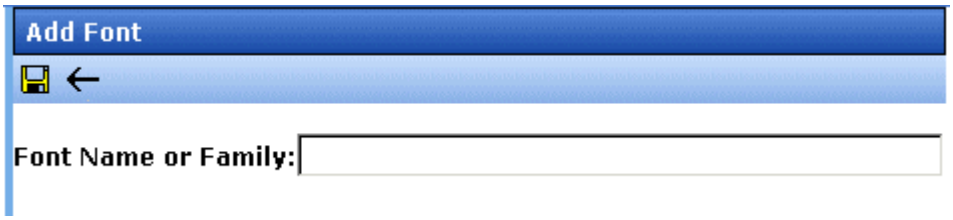
NOTE Only members of the Administrator User Group can view, add, or edit fonts.

Adding Fonts

To add a font to the application, follow these steps.

1. From the left frame of the Workarea, click **Settings > Configuration > Fonts**.

2. Click the Add Font button ( ).
3. The add font screen is displayed.



4. Enter the font name or family into the text field provided.
5. Click the Save button (.)

The new font is available to use when adding or editing content.

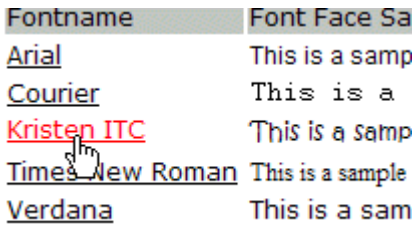
Viewing Fonts

When viewing fonts, you can also edit or delete them.

To view a font:

1. Access the font manager in your Workarea as described in "Adding Fonts" on page 1079.

2. Click the font you want to view.



3. The view font screen is displayed.

Edit Fonts

When you edit a font, the font or family name is changed. Editing does not change any fonts in existing content.

To edit a font name, follow these steps.

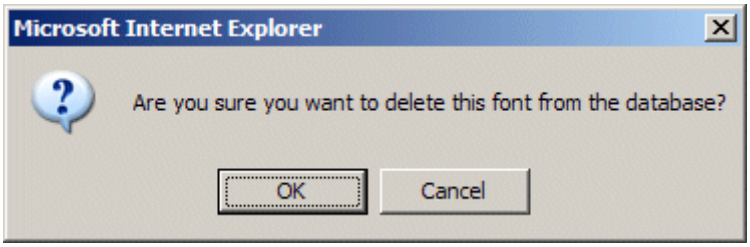
1. Access the view font screen, as described in "Viewing Fonts" on page 1080.
2. Click the Edit button ( ).
3. The Edit Font screen is displayed.

4. Edit the font name or family in the text field specified.
5. When finished, click the Update button ( ).

Delete Fonts

By deleting a font from the system, you are taking away the content contributors' use of that font in their content. To delete a font, follow these steps.

1. Access the view font screen, as described in "Viewing Fonts" on page 1080.
2. Click the Delete button ( ).
3. A message is displayed.



4. Click **OK** to delete the font.
5. The screen is refreshed, and the updated fonts table is displayed.

NOTE When you delete a font from Ektron CMS400.NET, you do not delete it from your computer.

Ektron’s Microsoft Office SharePoint Server Connector

Using this tool, Ektron’s customers can take full advantage of SharePoint’s collaborative workspace to create documents. These documents can then be delivered to a public facing Web site, corporate intranet or extranet enabled with all the latest search, navigation, Web 2.0 and social networking functionality provided by Ektron CMS400.NET

Ektron CMS400.NET supports the distribution of SharePoint content to any CMS400.NET folder. For example, your Marketing Department uses Microsoft SharePoint to create and edit content. After completing a press release, they use the **Publish to Ektron CMS** menu option to copy it from SharePoint to a content folder. Once there, the document can pass through an approval chain or be published immediately.

See Also:

- ”Enabling Ektron's SharePoint Connector” on page 1083
- ”Distributing SharePoint Content to CMS400.NET” on page 1084

Enabling Ektron's SharePoint Connector

To enable Ektron's SharePoint Connector in Microsoft SharePoint, simply copy the SharePoint_To_CMS.exe file from `C:\Program Files\Ektron\CMS400v75\Utilities` to your SharePoint server and follow the on screen dialog.

If you successfully log in during Step 1of the Publish To CMS400 process, then get a **Please Login** message in Step 2, make sure your web browser is configured to accept cookies from the **Ektron CMS400.NET** server. For example, if your Sharepoint server is on `sharepoint.company.com`, and **Ektron**

CMS400.NET is on `cms.company.com`, your web browser must allow cookies from `cms.company.com`.

If cookies are being blocked, a stop sign symbol appears at the bottom of Internet Explorer (shown below).

Distributing SharePoint Content to CMS400.NET

Once the SharePoint Connector is setup on a SharePoint server, navigate to a content item and click the dropdown arrow next to the content's title. A menu appears with the item **Publish to Ektron CMS**. Clicking this item starts a simple wizard that publishes the document into your CMS400.NET site's folder structure and taxonomy-based information architecture. This information is collected through a series of screens that guide you through the process.

After SharePoint content is distributed to CMS400.NET the first time, the original content is forever linked to the destination content. You cannot break the link. However, deleting the destination content in CMS400.NET allows you to select a new folder when you republish the content from SharePoint.

NOTE If you delete the destination content, you will not be able to access history revisions of the content in CMS400.NET.

If you want to later revise the document, you would typically edit it in SharePoint and select the **Publish to Ektron CMS** option again. When you do, you are asked to confirm replacing the document in the destination folder. You are not allowed to select another folder.

Prerequisites

When you click the **Publish to Ektron CMS** menu item, it will check to see if you can log into CMS400.NET using Active Directory. If so you will be logged in. If not, you will be prompted for your username and password. You must have the following permissions:

- Add

- Delete
- Restore Content.

If you do not have these permissions, the folder doesn't appear on the folder selection screen.

eCommerce

NOTE The eCommerce feature requires special license from Ektron, Inc. If you do not see this feature under Ektron CMS400.NET's **Modules** area, it may be because your license does not support eCommerce. For licensing information, contact sales@ektron.com.

eCommerce documentation consists of the following top level topics.

- "Introduction" on page 1086
- "Sample eCommerce Site" on page 1090
- "Access to eCommerce" on page 1090
- "Deploying eCommerce" on page 1090
- "eCommerce Configuration Screens" on page 1097
- "eCommerce Shipping Screens" on page 1142
- "eCommerce Tax Screens" on page 1153
- "eCommerce Products" on page 1164
- "eCommerce Order Management" on page 1229
  - "Messages" on page 1137
- "eCommerce Coupons" on page 1244
- "Using eSync with eCommerce" on page 1257
- "The eCommerce Audit Screen" on page 1258

Introduction

No matter what kind of sales you need to support, Ektron eCommerce brings you all functionality you need, giving you an entire toolset for building out the online marketplace you want. As part of Ektron **Ektron CMS400.NET**, you'll have a single application

running both your Web site and online marketplace, letting you manage both from the same interface.

Total integration means total control over your site via the author-friendly Workarea, and you'll open the doors to even more possibilities for marketing and revenue!

Core eCommerce Features

eCommerce supports all product types, from single items, to complex products (think movies available in DVD, Blu-ray or other formats), bundles, and kits.

eCommerce takes advantage of key CMS400.NET technologies, including Smart Forms and market-leading taxonomy and search. Product entry Smart Forms standardize how product information is entered; all information, attributes, and descriptive text is entered in one place and goes into the database as structured XML data (making it easy to repurpose this content wherever and whenever you need it).

Enhance product SEO in the Smart Form by setting attributes, adding metadata, and including photos and other media. Adding images of products auto-generates thumbnails and gives you complete control over sizes and number of images, as well as a clickthrough image gallery. Images can also be defined for a product type via the taxonomy.

Control over your product catalog extends to cross-sell and upsell features, and Ektron's taxonomy enables products to be classified in multiple ways, providing more options for you to help customers find what they are looking for.

CMS400.NET's Web 2.0 content review tools find new uses here, letting your customers post opinions and ratings on products. The product search uses Ektron's unparalleled taxonomy, and can be filtered by price, ratings, reviews, and more.

Existing product data can be imported into eCommerce and the CMS using Ektron's flexible, scalable API.

When a customer is a member of your eCommerce site, they can name and save shopping baskets for future purchases or as wish

lists and registries. Your site administrators can always see which baskets are open.

Checking out is a multi-step process: you can display all steps on a single page or distribute them across multiple pages. While site visitors are checking out, they can save as many shipping addresses as they want, or simply check “same as billing.”

Shipping uses real-time rates by plugging into external providers, or you can use your own rates by setting up an internal shipping provider. Rates are quite customizable: they can be set up by package size, product weight, and even product price ranges.

Payment options are flexible with eCommerce too: you can decide if you want to accept credit cards, checks, and PayPal accounts. Also, payment gateways (such as Payflow and Authorize.Net) are supported out-of-the-box to authorize and capture transactions. Or, create your own payment gateway (one that allows terms or any other payment option).

Once the order is reviewed and submitted (and payment is authorized), it can go through a simple or complex routing through your own processing setup or plug-in to your existing CRM or ERP to process the order. When the order is processed, the CRM/ERP notifies CMS400.NET that it is complete. Online inventory is kept up to date; you can set properties so that when items on hand drop below a certain level, it triggers a sequence to notify your inventory control.

Ektron eCommerce leverages the advanced core functionality of CMS400.NET to give developers a complete toolset that works out-of-the-box or can be completely customized (and everything in between). Powerful Web 2.0 controls of CMS400.NET, including memberships, ratings, forums and commenting, enabling you to quickly implement an eCommerce site with the community-based information they want to help them to make buying decisions.

As a .NET application, eCommerce uses the same database as CMS400.NET to maximize efficiencies and takes advantage of SQL cluster capabilities to be truly scalable. There is no need for “glue code” to tie a third-party ecommerce application to your Web site. Ektron eCommerce utilizes CMS400.NET’s existing customizability to enable integration into any IT infrastructure. Open architecture and a new ektron.cms.commerce API makes

any commerce configuration possible, letting you tie it to your backend systems.

Coupons, Taxes and Pricing

eCommerce supports a complete array of pricing schemes: individual pricing, separate pricing within complex products, tiered pricing to support volume discounts, and more. Online coupon capability is also included, letting you set the type (dollar amount, percentage) and at what level those coupons are applied (product level, basket level and type of item).

For global business opportunities, all international currencies are available. You are able to use conversion rates to determine prices or set flat costs for each product. This goes hand in hand with the tax options available. Set tax classes, including country, state, and local (by postal code) as well as taxes for specific classes of goods, and be able to sell to even more customers.

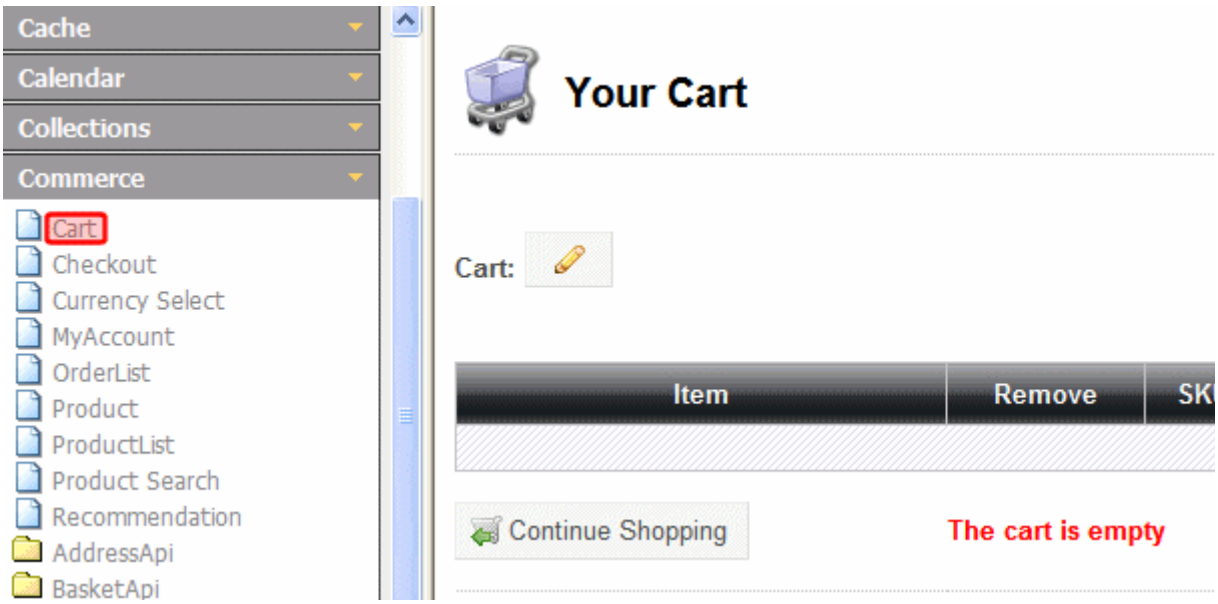
Developer Flexibility

Ektron eCommerce leverages the advanced core functionality of **Ektron CMS400.NET** to give developers a complete toolset that works out-of-the-box or can be completely customized (and everything in between). Powerful Web 2.0 controls of CMS400.NET, including memberships, ratings, forums and commenting, enabling you to quickly implement an eCommerce site with the community-based information they want to help them to make buying decisions.

As a .NET application, eCommerce uses the same database as **Ektron CMS400.NET** to maximize efficiencies and takes advantage of SQL cluster capabilities to be truly scalable. There is no need for “glue code” to tie a third-party eCommerce application to your Web site. Ektron eCommerce utilizes **Ektron CMS400.NET**’s existing customizability to enable integration into any IT infrastructure. Open architecture and a new ektron.cms.commerce API makes any commerce configuration possible, letting you tie it in to your backend systems.

Sample eCommerce Site

To see a sample eCommerce site, download the Developer Sample Site. Within that site, you can try out a customer shopping experience by going to `http://site root/cms400developer/developer/default.aspx` then **Commerce > Cart**. The following shopping cart screen appears.



You can add items to the cart then proceed through a sample checkout process.

Access to eCommerce

Only members of the Administrators group or those assigned the eCommerce Admin role can access the eCommerce screens within the **Ektron CMS400.NET** Workarea. *See Also:* "Defining Roles" on page 795

Deploying eCommerce

Follow these steps to deploy **Ektron CMS400.NET**'s eCommerce feature.

1. ”Determine Units of Measure” on page 1091
2. ”Determine the Default Currency” on page 1091
3. ”Set Up eCommerce Configuration Screens” on page 1091
4. ”Set up eCommerce Catalog Entries” on page 1093
5. Set up your templates and eCommerce server controls. *See Also:* The **Ektron CMS400.NET** Developer Manual section “eCommerce Server Controls.”

See Also: ”Images in eCommerce” on page 1094

Determine Units of Measure

For each item sold on your Web site, you define a height, length, depth, and weight. If English, the units are inches and pounds. If Metric, the units are centimeters and kilograms. This information is used to calculate shipping costs.

By default, this is set to English. To change to Metric, open the `siteroot/web.config` file, and edit the value of the `ek_measurementsystem` property.

```
<ektroncommerce>

ek_measurementsystem value = “english” or “metric”
```

WARNING! After you make this decision and build your eCommerce system, you cannot change the units of measure.

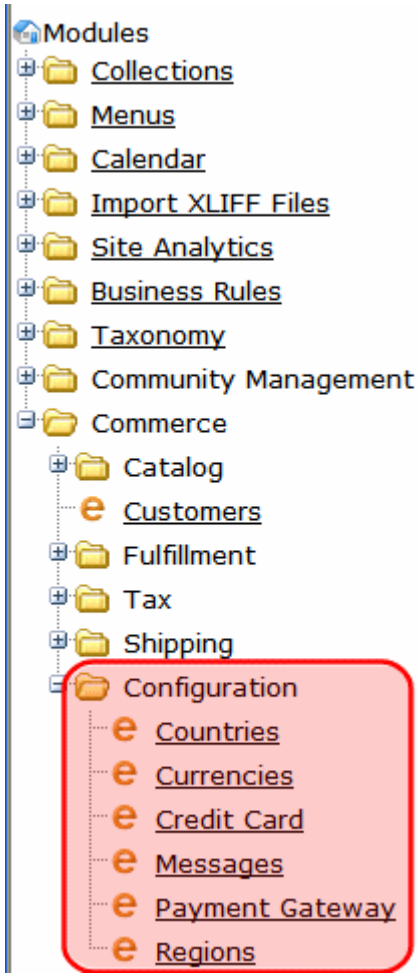
Determine the Default Currency

Decide on a *default currency*, the one on which all exchange rates are based. *See Also:* ”The Default Currency” on page 1108

WARNING! After your eCommerce feature goes live, do *not* change the `ek_ecom_DefaultCurrencyId` value in web.config.

Set Up eCommerce Configuration Screens

The configuration screens collect critical information that is used throughout the eCommerce feature.



Set up eCommerce configuration screens in this order.

Order	Screen	Dependent on	For more information, see
1	Countries (enable ones you will support)		”Countries” on page 1097
2	Regions	Countries	”Regions” on page 1101
3	Tax classes		”The Tax Class Screens” on page 1155

Order	Screen	Dependent on	For more information, see
4	• Postal Code Tax • Regional Tax • Country Tax	• Countries, Regions, Tax Class • Regions, Tax Class • Countries, Tax Class	• "Postal Tax Tables" on page 1157, • "Regional Tax Tables" on page 1159 • "Country Tax Tables" on page 1161
5	Warehouse	Countries and Regions	"Warehouse" on page 1142
6	Credit Card Types, Payment Options		"Credit Card Types" on page 1132, "Payment Options" on page 1113
7	Currencies (enable ones you will support)		"Currencies" on page 1105
8	Shipping Methods and Packages		"Shipping Methods" on page 1147, "Packages" on page 1145
9	Messages		"Messages" on page 1137

Set up eCommerce Catalog Entries

Order	Screen	Dependent on	For more information, see
1	Product Types		"Product Types" on page 1164
2	Catalog Folders	Product Types	"Creating a Catalog Folder" on page 1190
3	Entries in Catalog Folders	• Product Types • Catalog folders	"Creating a Catalog Entry" on page 1193

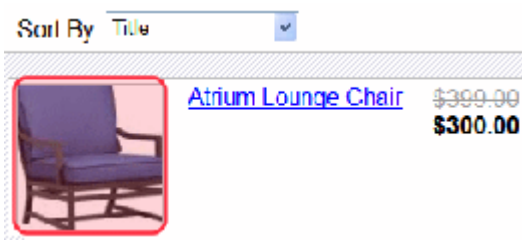
Order	Screen	Dependent on	For more information, see
4	Create Web Pages using eCommerce Server Controls	Catalog entries	**Ektron CMS400.NET** Developer Manual section “eCommerce Server Controls” For samples of the server controls, install the developer sample site. Then go to *site root folder*/developer/default.aspx > **Commerce**. Note: To download the developer sample site, go to http://www.ektron.com/solutions/startersites/.
5	Coupons	Catalog entries	”Creating a Coupon” on page 1244

Images in eCommerce

When using eCommerce, a site visitor sees images that represent products or services for sale. The following table lists each image that appears on an eCommerce Web site, and the source of each one.

NOTE You control your Web’s site’s display of catalog entries through eCommerce Server Controls. They are documented in the Ektron CMS400.NET Developer Manual section “Introduction to Ektron CMS400.NET Server Controls” > “eCommerce Server Controls.”

Where Image Appears	Example	Image Location in Workarea
Product Server Control, main image	 **Image on Product control**	On the catalog entry's **Content** tab Note: The sample catalog entries are based on Product Types whose XML Smart Form includes an Image field. As a result, the product description, (which appears at the top of the Product Server control) includes an image. This is not required, merely a suggested implementation.
Product Server Control, thumbnails	 **Thumbnails on lower portion of Product control** Note: To control the thumbnail display, use the Xslt files generated by the Product, Product List, Product Search, and Recommendation server controls.	On the catalog entry's **Media** screen. If an image's **Gallery Display** field is set to **Yes**, its smallest thumbnail appears on the Product server control, below the content area. (This assumes you are using the control's default xslt.) When a site visitor clicks a thumbnail, the corresponding full image appears. Since the Media screen can have several images, several thumbnails can appear. They appear left to right reflecting their sequence (top to bottom) on the **Media** screen. *See Also:* "Determining Thumbnail Size" on page 1217

Where Image Appears	Example	Image Location in Workarea
Product List, Product Search, and Recommendation server controls	 **Image on Product List control**	On the catalog entry's **Media** tab, the image designated as **Product Icon** *See Also:* "Entering a Catalog Entry's Media" on page 1215

eCommerce Configuration Screens

- ”Countries” on page 1097
- ”Regions” on page 1101
- ”Currencies” on page 1105
- ”Credit Card Types” on page 1132
- ”Payment Options” on page 1113
- ”Messages” on page 1137

Countries

Use the Countries screen to modify existing country information or add new countries to eCommerce.

How Countries are Used

- **to define country tax tables**. For example, assume Canada has a national tax of 5% that applies to the sale of certain goods. National tax tables are defined in the Country Tax Tables screen.

- **to determine shipping costs**. In the Order checkout process, the purchaser selects a shipping address, which includes country. So, be sure to enable all countries from which site visitors can enter orders.

  Countries are also part of the location on the Warehouse screen. An order’s shipping cost is determined by the distance between the warehouse and the destination.

See Also:

- ”Default Countries” on page 1098
- ”Creating a Country” on page 1099
- ”Editing a Country” on page 1100

- ”Deleting a Country” on page 1101

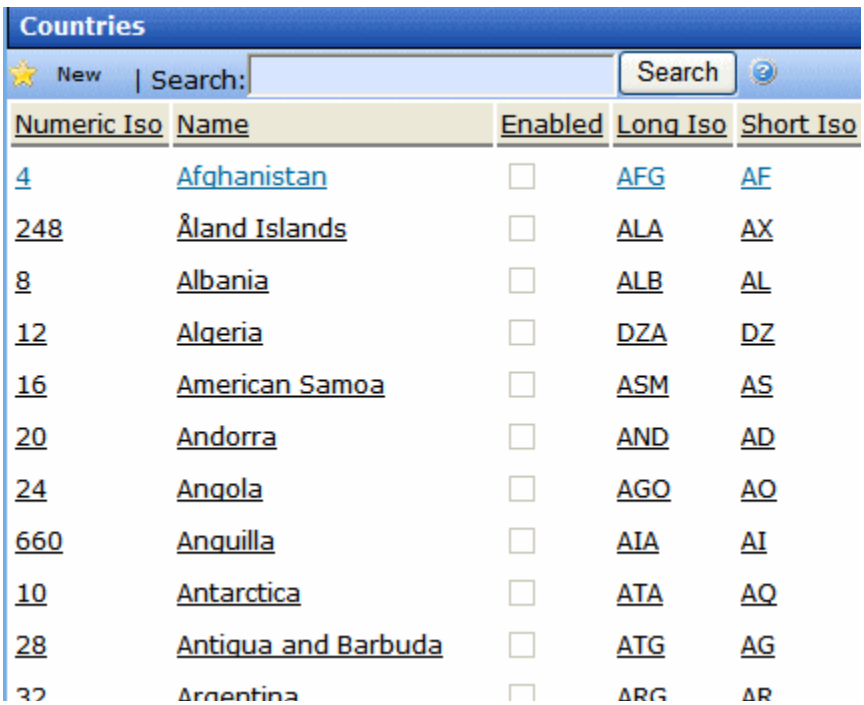
Default Countries

By default, **Ektron CMS400.NET** provides information for all countries on the ISO list of English country names and code elements (http://www.iso.org/iso/country_codes/iso_3166_code_lists/english_country_names_and_code_elements.htm).

The following is provided for each country.

- name
- numeric ISO code
- long alphabetical ISO code
- short alphabetical ISO code

The countries screen lets you enter new countries, as well as edit information for any provided countries.



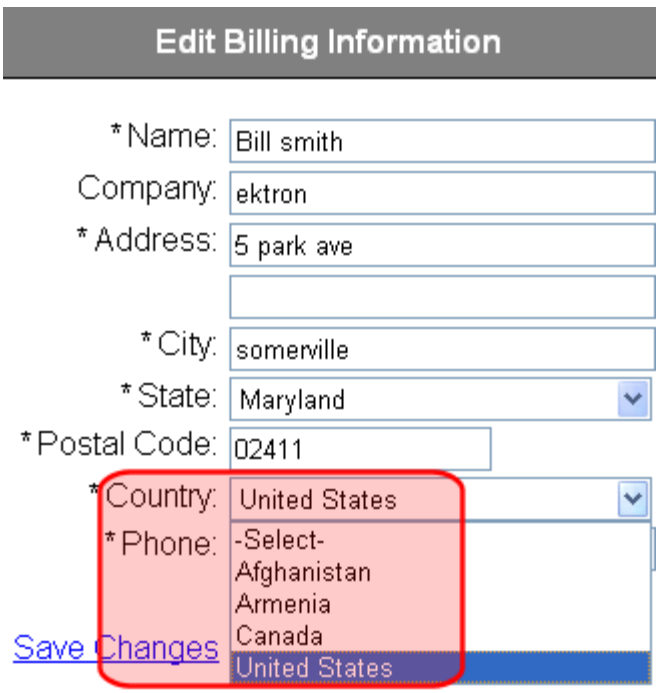
Creating a Country

Prerequisite: The new country's ISO codes

To add a new country, follow these steps. *See Also:* "Countries" on page 1097

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Countries**.
2. Click **New > Country**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the country's name.
Numeric ISO	Enter the country's ISO 3166-1 three digit numeric ISO code. *See Also:* http://en.wikipedia.org/wiki/ISO_3166-1_numeric

Field	Description
Enabled	Check this box if you want this country to be active. Only active countries can be selected on the Edit Billing Information screen, which appears during the Checkout procedure. 
Long ISO	Enter the country's ISO 3166-1 alpha-3, three letter country code. *See Also:* http://en.wikipedia.org/wiki/ISO_3166-1_alpha-3
Short ISO	Enter the country's ISO 3166-1 alpha-2, two letter country code. *See Also:* http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2

Editing a Country

Follow these steps to edit a country. *See Also:* "Countries" on page 1097

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Countries**.
2. Click the name of the country that you want to edit.
3. Click the Edit button ( ).

4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 1099

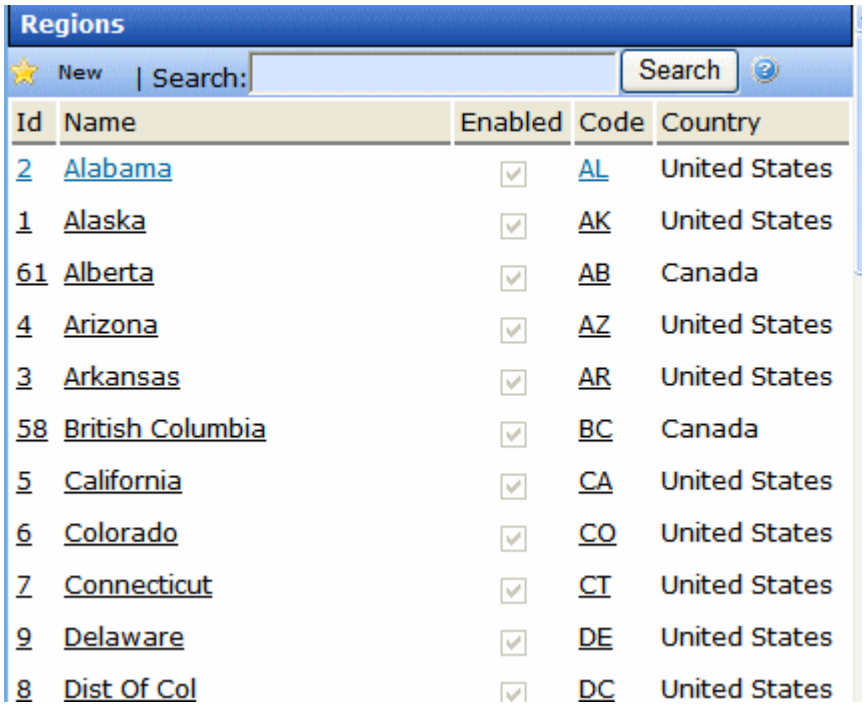
Deleting a Country

Follow these steps to delete a country. *See Also:* "Countries" on page 1097

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Countries**.
2. Click the name of the country that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The country is deleted.

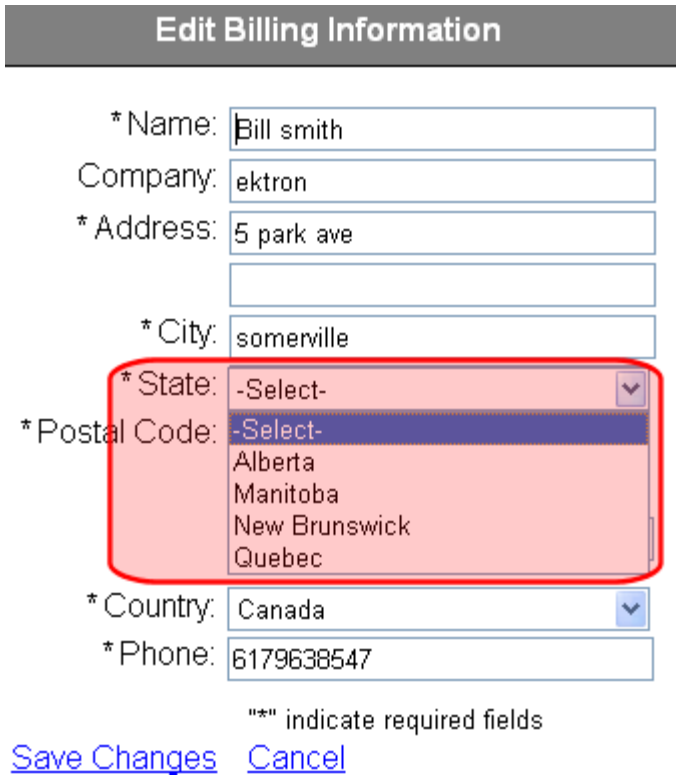
Regions

The Regions screen lets you define geographic regions within countries that your eCommerce site services. For example, in the United States of America, each state is a region.



Id	Name	Enabled	Code	Country
2	Alabama	☑	AL	United States
1	Alaska	☑	AK	United States
61	Alberta	☑	AB	Canada
4	Arizona	☑	AZ	United States
3	Arkansas	☑	AR	United States
58	British Columbia	☑	BC	Canada
5	California	☑	CA	United States
6	Colorado	☑	CO	United States
7	Connecticut	☑	CT	United States
9	Delaware	☑	DE	United States
8	Dist Of Col	☑	DC	United States

Regions are used in the same way that countries are used. *See Also:* "How Countries are Used" on page 1097



Default Regions

By default, the Regions screen includes all 50 United States of America, the District of Columbia, and 9 Canadian Provinces.

See Also:

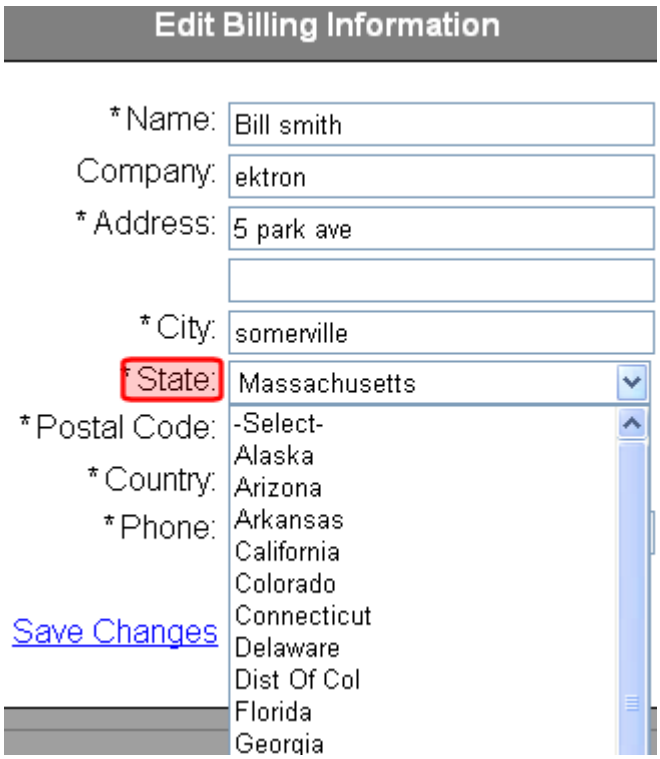
- "Creating a Region" on page 1103
- "Editing a Region" on page 1105
- "Deleting a Region" on page 1105

Creating a Region

Prerequisite: The region's country is defined in the Countries screen

To add a new region, follow these steps. *See Also:* "Regions" on page 1101

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Regions**.
2. Click **New > Region**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the region's name.
Enabled	Check this box if you want this region to be active. Only active regions can be selected on the Edit Billing Information screen, which appears when site visitors enter billing information during the Checkout procedure. 
Code	Enter an abbreviation for this region.
Country	Select this region's country from the pull down list. If the country is not there, exit this screen, and create the country using the Countries screen.

Field	Description
Add another region to this country?	This field saves the effort of selecting a country when entering several regions for one country. To add more regions for this country, check this box and press the Save button ( ). When you do, the screen refreshes, and the most recently selected country appears as the default.

Editing a Region

Follow these steps to edit a region. *See Also:* "Regions" on page 1101

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Regions**.
2. Click the name of the region that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 1104

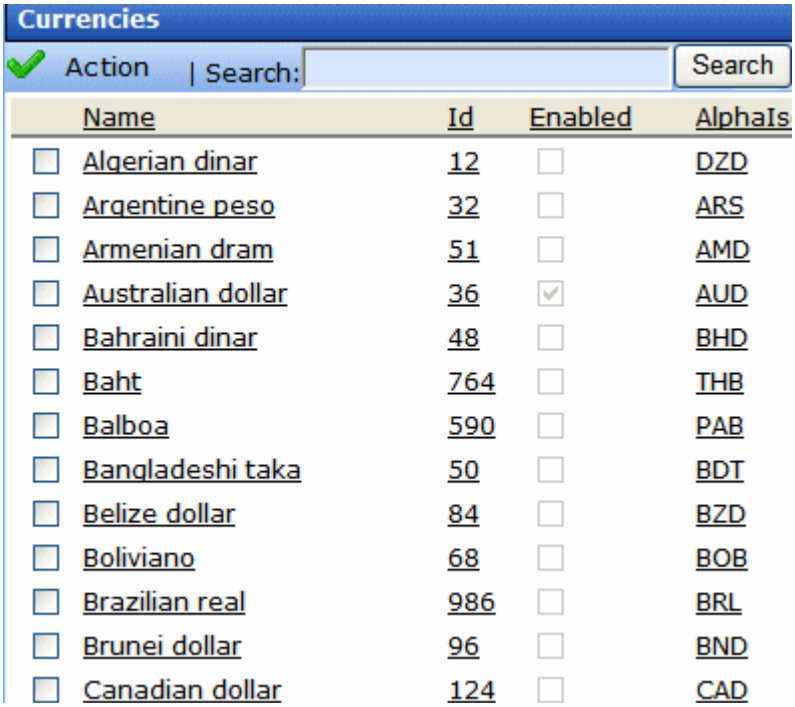
Deleting a Region

Follow these steps to delete a region. *See Also:* "Regions" on page 1101

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Regions**.
2. Click the name of the region that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The region is deleted.

Currencies

eCommerce supports all currencies. However, site visitors can only choose enabled currencies. The Currency screen lets you enable and edit information for all installed currencies.



See Also:

- ”Installed Currencies” on page 1106
- ”The Default Currency” on page 1108
- ”How Currencies Are Used in the Currency Select Server Control” on page 1109
- ”How Exchange Rate Affects an Item’s Price” on page 1110
- ”Updating the Exchange Rate” on page 1111
- ”Editing a Currency” on page 1111
- ”Deleting a Currency” on page 1112

Installed Currencies

By default, **Ektron CMS400.NET** provides all currencies on the ISO 4217 currency names and code elements list (http://www.iso.org/iso/support/faqs/faqs_widely_used_standards/widely_used_standards_other/currency_codes/currency_codes_list-1.htm).

The following information is provided for each installed currency.

- name
- enabled (yes or no)
- numeric ISO code
- alpha ISO code
- exchange rate

Enabled Currencies

When users are setting prices in the **Ektron CMS400.NET** Workarea or site visitors are shopping, they can only choose enabled currencies. When you install **Ektron CMS400.NET**, the following currencies are enabled.

- U.S. dollar (the *default currency*. *See Also:* "The Default Currency" on page 1108)
- Euro
- Australian dollar

TIP! To see which currencies (other than the default) are enabled, click **Action > Edit Exchange Rates** from the Currencies screen. Only non-default, enabled currencies appear.

WARNING! The Euro and Australian dollar are shipped with a default exchange rate. If you will support these currencies, you should update the rate to its current value before going live. *See Also:* "Updating the Exchange Rate" on page 1111

To enable any installed currency, follow these steps.

1. Click **Ektron CMS400.NET** Workarea > **Modules > Commerce> Configuration > Currencies**.
2. Click the currency you want to enable.

TIP! Use the Search box to quickly find a currency.

3. The Edit Currency screen appears.
4. Check the **Enabled** check box.
5. Click Save .

The Default Currency

The default currency is the reference currency when setting the exchange rate on the Edit Currency screen. For example, if the default is US dollars, **USD** appears on the left of the exchange rate equation, as shown below.

The default currency is also used as the default choice in the Currency Selector server control, and on the **Pricing** tab of the View/Edit Catalog Entry screen.

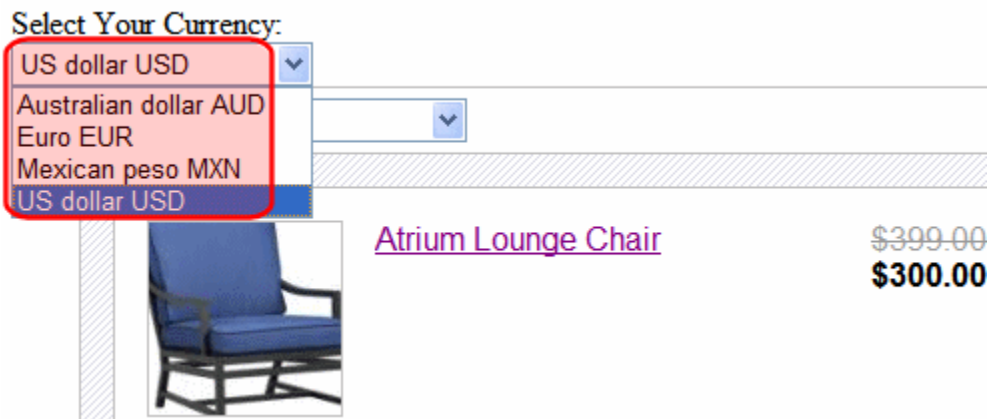
Viewing and Changing the Default Currency

When you install **Ektron CMS400.NET**, the default currency is the Numeric ISO code for U.S. dollars (Id 840). At that time, you can change this in the web.config file's `ek_ecom_DefaultCurrencyId` tag. However, once you set your default currency in web.config and begin to deploy eCommerce, do not change it.

WARNING! After your eCommerce feature goes live, do *not* change the `ek_ecom_DefaultCurrencyId` value in web.config.

How Currencies Are Used in the Currency Select Server Control

If your developer places a Currency Select server control on a page, a site visitor can use it to select any enabled currency.



After a currency is selected, the prices on the page change to that currency. *See Also:* "How Exchange Rate Affects an Item's Price" on page 1110

From that point on, the cart and order use the selected currency.

How Exchange Rate Affects an Item's Price

The Edit Currency screen lets you define an exchange rate between the default and any other currency. *See Also:* "The Default Currency" on page 1108; "Updating the Exchange Rate" on page 1111

The exchange rate can dynamically adjust prices when the rate changes. *See Also:* "Alternate Currency Pricing" on page 1208

Updating the Exchange Rate

Using the Ektron CMS400.NET API

The following Ektron API supports calling an exchange rate service to update rates automatically: `Ektron.Cms.Commerce.ExchangeRateApi`. For more information, see the Ektron CMS400.Net API documentation.

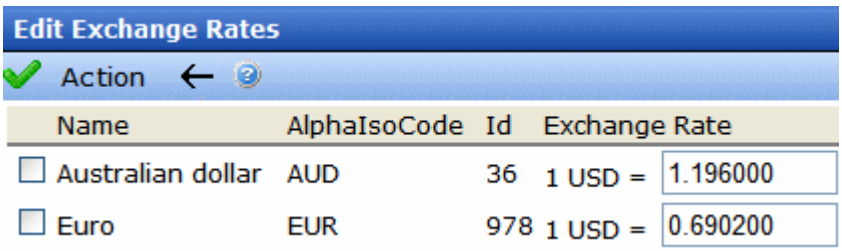
Using the Update Exchange Rates Screen

The Edit Exchange Rates screen lets you update the exchange rate for enabled currencies. *See Also:* "How Exchange Rate Affects an Item's Price" on page 1110;"Currencies" on page 1105

TIP! A good Web site for finding exchange rates is http://www.xe.com/ucc/.

To use the screen, follow these steps.

1. In the Ektron CMS400.NET Workarea, go to **Modules > Commerce > Configuration > Currencies**.
2. Click **Action > Edit Exchange Rates**.
3. The Edit Exchange Rates screen appears, showing all enabled currencies and their exchange rates.



4. Update rates as needed.
5. Click **Action > Update**.

Editing a Currency

Follow these steps to edit a currency. *See Also:* "Currencies" on page 1105

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Currencies**.
2. Click the currency you want to edit.
3. You can only edit the **Name**, **Enabled**, and **Exchange Rate** fields. All fields are described below.

Field	Description
Name	Enter the currency's name.
Numeric ISO Code	The currency's ISO 4217 three-digit numeric ISO code appears. *See Also:* "Installed Currencies" on page 1106
Alpha ISO Code	The country's ISO 4217 alphabetic, three-letter currency code appears. *See Also:* "Installed Currencies" on page 1106
Enabled	Check this box to enable this currency. *See Also:* "Enabled Currencies" on page 1107
Exchange Rate	Enter the exchange rate between this currency and the default one. *See Also:* "How Exchange Rate Affects an Item's Price" on page 1110; "The Default Currency" on page 1108

4. Click the Save button ( ).

Deleting a Currency

Follow these steps to delete a currency. *See Also:* "Currencies" on page 1105

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Currencies**.
2. Check the box next to the currency that you want to delete.
3. Click **Action > Delete Selected**.
4. A confirmation message appears. Click **OK**.
5. The currency is deleted.

Payment Options

The Payment Options screen lets you determine which options are available for your customers to pay for their purchases.

- Paypal - *See Also:* ”PayPal Support” on page 1113
- a Payment Gateway, such as AuthorizeNet - *See Also:* ”Payment Gateway” on page 1123

Both options can be enabled, but only one gateway can be enabled at a time.

PayPal Support

“PayPal is an ecommerce business allowing payments and money transfers to be made through the Internet. PayPal serves as an electronic alternative to traditional paper methods such as checks and money orders.

A PayPal account can be funded with an electronic debit from a bank account or by a credit card. The recipient of a PayPal transfer can either request a check from PayPal, establish their own PayPal deposit account or request a transfer to their bank account. PayPal is an example of a payment intermediary service that facilitates worldwide e-commerce.” `source: wikipedia`

See Also:

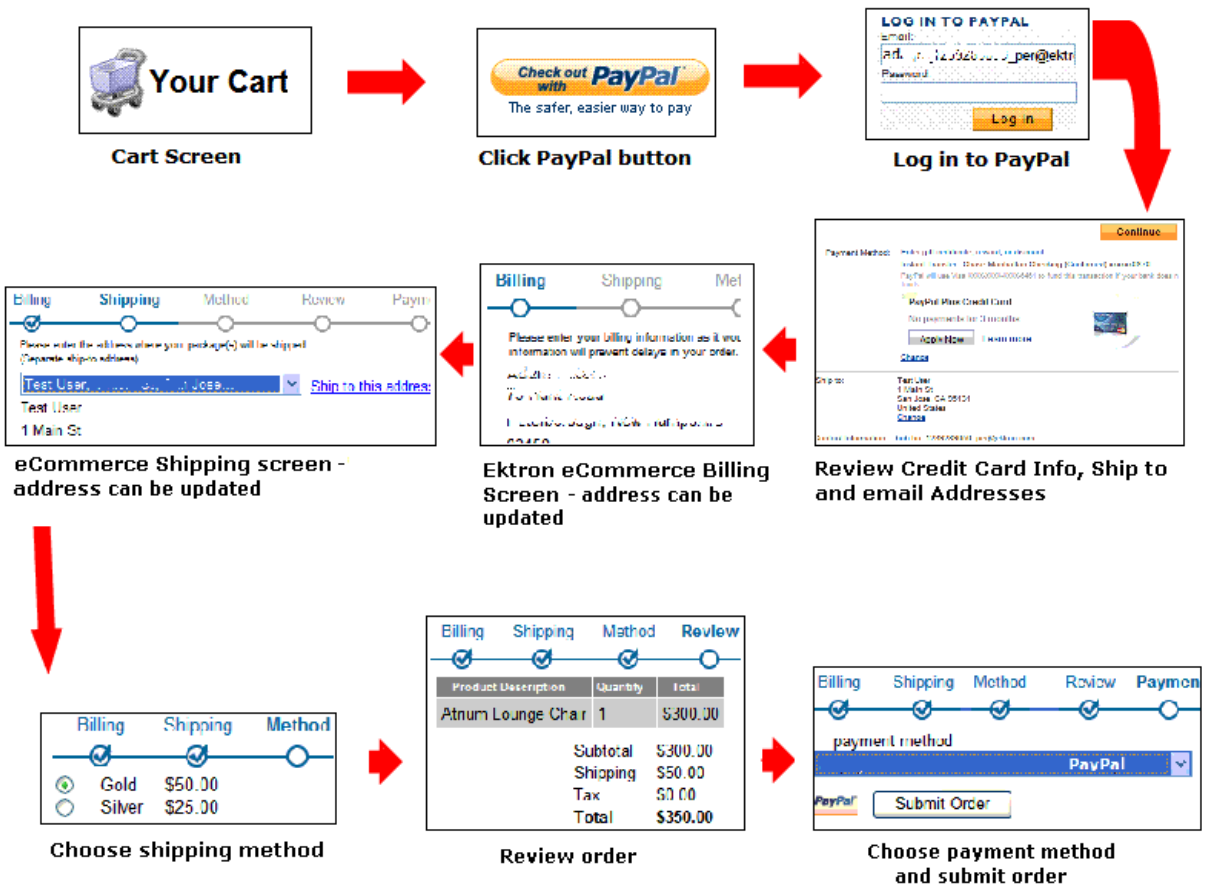
- ”Using PayPal with Ektron CMS400.NET’s eCommerce” on page 1113
- ”Paypal Documentation” on page 1115
- ”Enabling PayPal Support” on page 1116
- ”Customizing the PayPal Page” on page 1122

Using PayPal with Ektron CMS400.NET’s eCommerce

Your customers can use PayPal to pay for purchases from either of two points in the checkout process

- the shopping cart screen
- the payment screen

If a site visitor accesses PayPal via the shopping cart screen, he follows these steps.



Here is the sequence illustrated above.

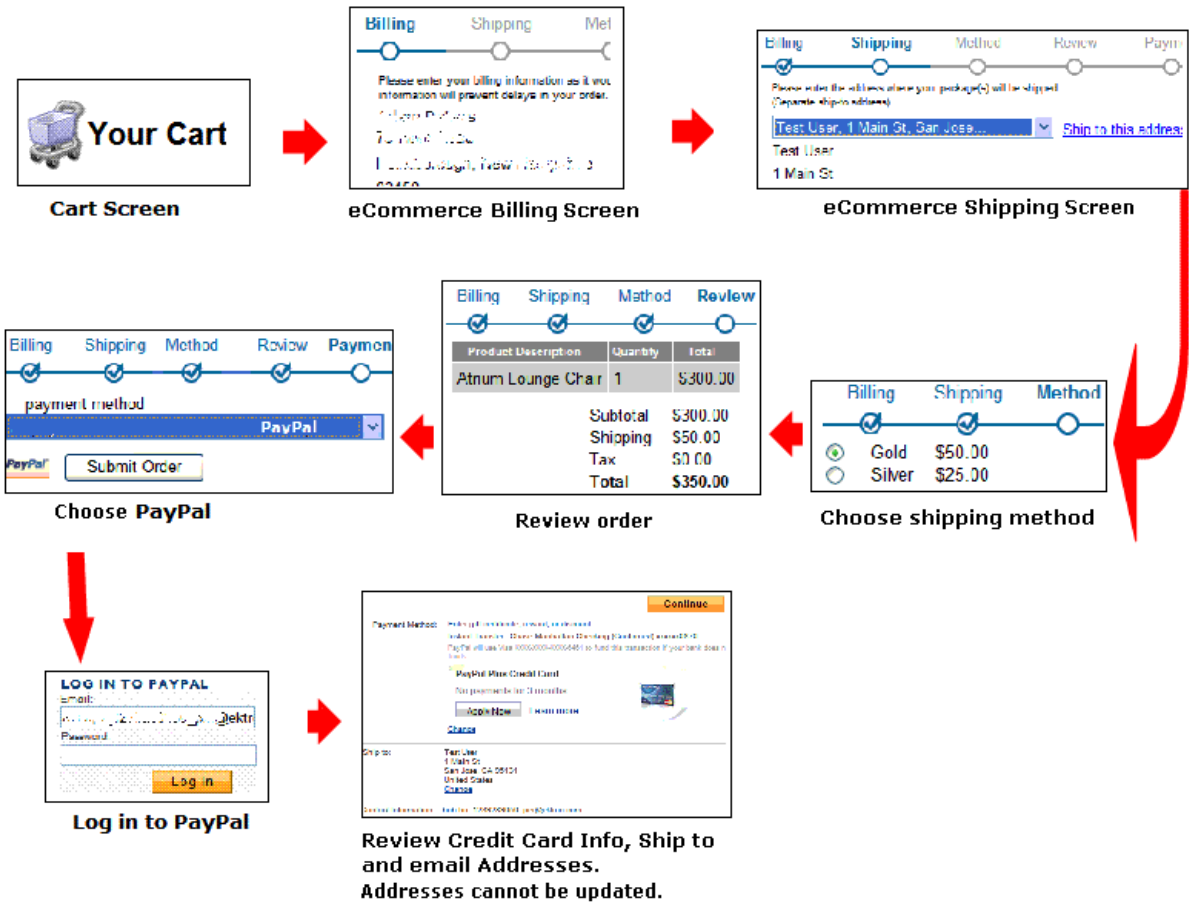
1. From the Cart screen, a site visitor clicks the PayPal button.
2. He logs into his PayPal account.
3. Information from that account is used to populate the default shipping and billing addresses.
4. The site visitor can change addresses if needed.

NOTE If the PayPal account address is used for the order, it is saved as part of the site visitor's **Ektron CMS400.NET** eCommerce account information.

5. Shipping costs are added.

6. The order is confirmed.
7. Site visitor checks out via PayPal.

Alternatively, the site visitor can use the standard eCommerce checkout process, select PayPal on the payment screen, and complete his order using the PayPal payment screen. That sequence is illustrated below.



Paypal Documentation

Use the following resources to familiarize yourself with integrating PayPal into your eCommerce site.

- PayPal Technical Documentation - https://cms.paypal.com/us/cgi-bin/?cmd=_render-content&content_ID=developer/library_documentation
- PayPal Express Checkout Integration Guide - https://cms.paypal.com/cms_content/en_US/files/developer/PP_ExpressCheckout_IntegrationGuide.pdf
- Payflow ACH Payment Service Guide - https://cms.paypal.com/cms_content/US/en_US/files/developer/PP_ACHPayment_Guide.pdf

IMPORTANT! PayPal requires you to place the Pay with PayPal option on both the shopping cart and payment screens.

Enabling PayPal Support

To enable PayPal support in **Ektron CMS400.NET**, follow these steps.

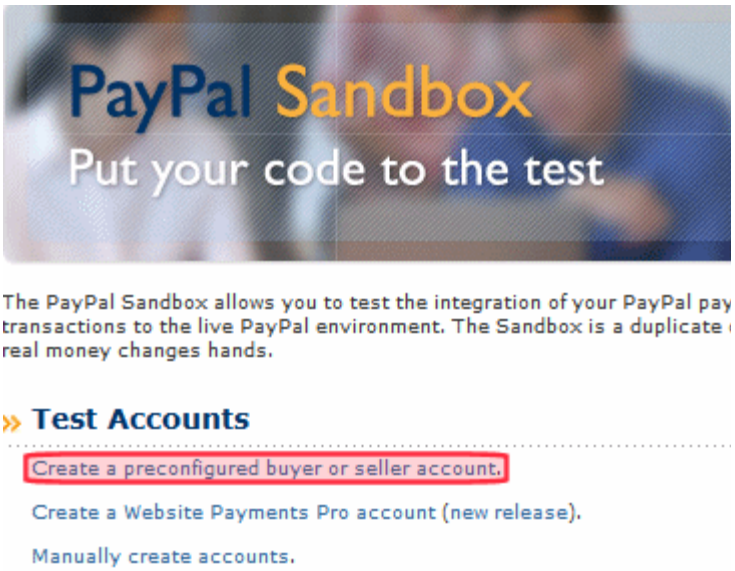
- "Create a Sandbox Account" on page 1116. This step includes updating **Ektron CMS400.NET**'s web.config file.
- "Enable PayPal in the Ektron CMS400.NET Workarea" on page 1121

Create a Sandbox Account

1. Sign on to http://www.sandbox.paypal.com.
2. Sign up for an account.

NOTE If you plan to support the eCommerce recurring billing feature, make sure your PayPal account supports this service. *See Also:* "Creating a Subscription" on page 1181

3. After a short while, you receive an email confirmation that directs you to another page.
4. Log in using the information you provided in Step 2.
5. Under **Test Accounts**, click **Create a preconfigured buyer or seller account**.


PayPal Sandbox
Put your code to the test
The PayPal Sandbox allows you to test the integration of your PayPal pay
transactions to the live PayPal environment. The Sandbox is a duplicate
real money changes hands.
Test Accounts
Create a preconfigured buyer or seller account.
Create a Website Payments Pro account (new release).
Manually create accounts.

6. Create a buyer account. You will use this to test the customer experience.

TIP! Change the password to one you can easily remember.

Country:
United States
Account Type:
Buyer (Use to represent your customer's experi
Seller (Use to represent yourself as the merchar
Login Email:
@ektron.com
This email address is only used inside the Sandbox.
Password:
Your password must be at least 8 characters.

7. Click **Home > Test Accounts > Create a preconfigured buyer or seller account**.
8. This time, click **Account Type Seller**.

9. Create a seller account. You will use this to test the merchant experience.

TIP! Change the default password to one that you can easily remember.

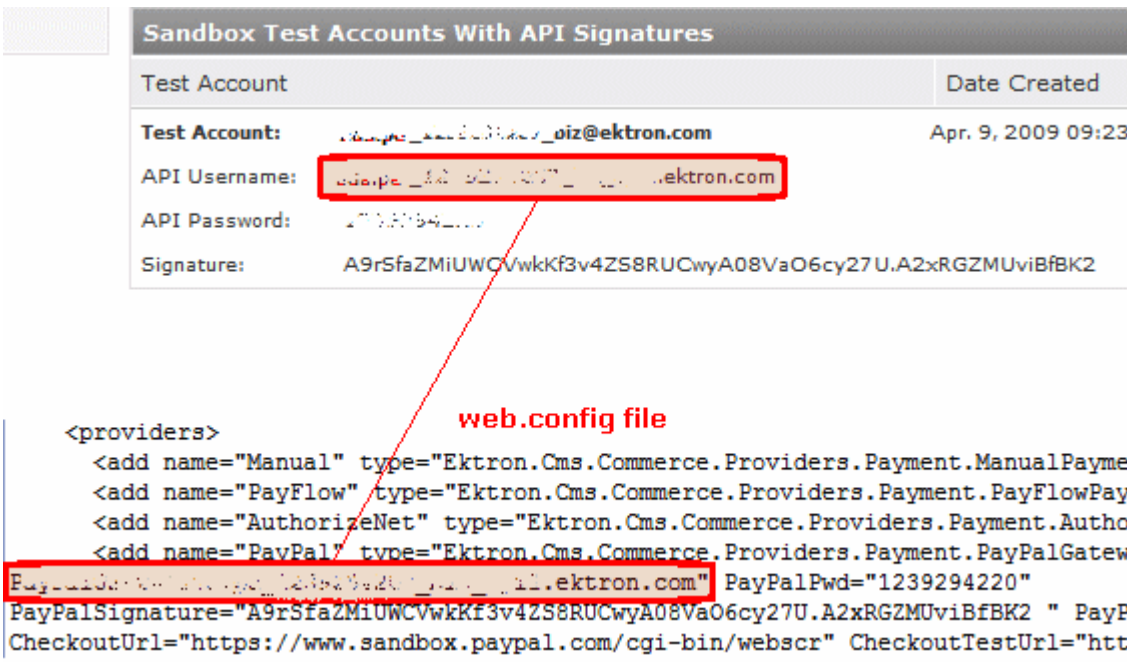
10. In the upper left corner of the screen, click **API Credentials**.

11. Open your *siteroot*/`web.config` file.

12. Copy the following values from the API Credentials screen into the web config's `providers/paypal` element. Save web.config.

PayPal Test Account Value	web.config Paypal Element
API Username	PayPalUser
API Password	PayPalPwd
Signature	PayPalSignature

The following illustration shows the PayPal API Username copied into the web.config file's `PayPalUser` property.



If you want to encrypt these values, see "Encrypting PayPal Authentication Values" on page 1119.

Encrypting PayPal Authentication Values

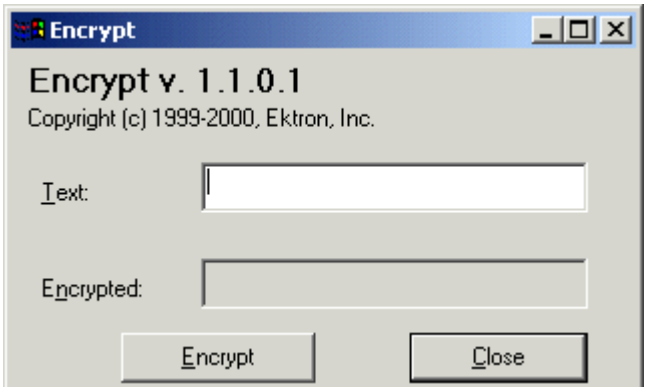
Follow these steps to encrypt the following values in the web.config file's `providers/paypal` element.

- PayPalUser
- PayPalPwd (password)
- PayPalSignature

1. Open the *site root*/web.config file.
2. Set the AuthValuesEncrypted element to true.

```
<DocumentManagerData configSource="AssetManagement.config" />
<EktronPaymentGateway defaultProvider="Automatic">
  <providers>
    <add name="Manual" type="Ektron.Cms.Commerce.Providers.Payment.ManualPayment" /
    <add name="PayFlow" type="Ektron.Cms.Commerce.Providers.Payment.PayFlowPayment"
    <add name="AuthorizeNet" type="Ektron.Cms.Commerce.Providers.Payment.AuthorizeN
    <add name="PayPal" type="Ektron.Cms.Commerce.Providers.Payment.PayPalGateway"
AuthValuesEncrypted="false"
```

3. Save and close web.config.
4. Open C:\Program Files\Ektron\CMS400v7*x*\Utilities.
5. Run EncryptEmailPassword.exe.
6. The Encrypt Utility dialog appears.

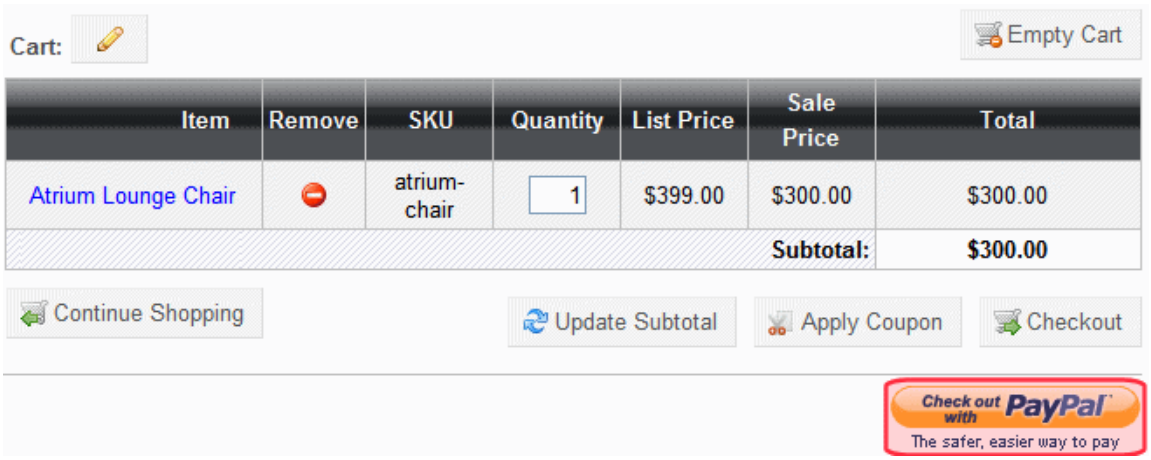


7. Enter the PayPal user name into the **Text** field.
8. Click the **Encrypt** button.
9. The screen displays encrypted text in the **Encrypted** field.
10. Copy the encrypted text and paste it into the web.config file's PayPalUser element value.
11. Repeat Steps 7 through 10 for PayPalPwd and PayPalSignature.

Test the Sandbox Account

After creating a sandbox account, you should test it.

1. Sign into the **Developer Sample site > eCommerce > Cart**.
2. Click the PayPal button.



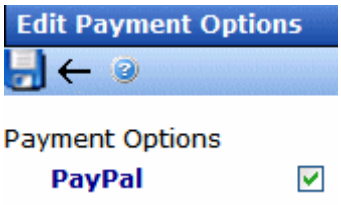
3. Enter the buyer account user name and password that you created in "Create a Sandbox Account" on page 1116.
4. You proceed to the **Ektron CMS400.NET** Checkout screen.

After completing these steps, you have verified your PayPal buyer experience.

Enable PayPal in the Ektron CMS400.NET Workarea

To enable PayPal in the **Ektron CMS400.NET** Workarea, follow these steps.

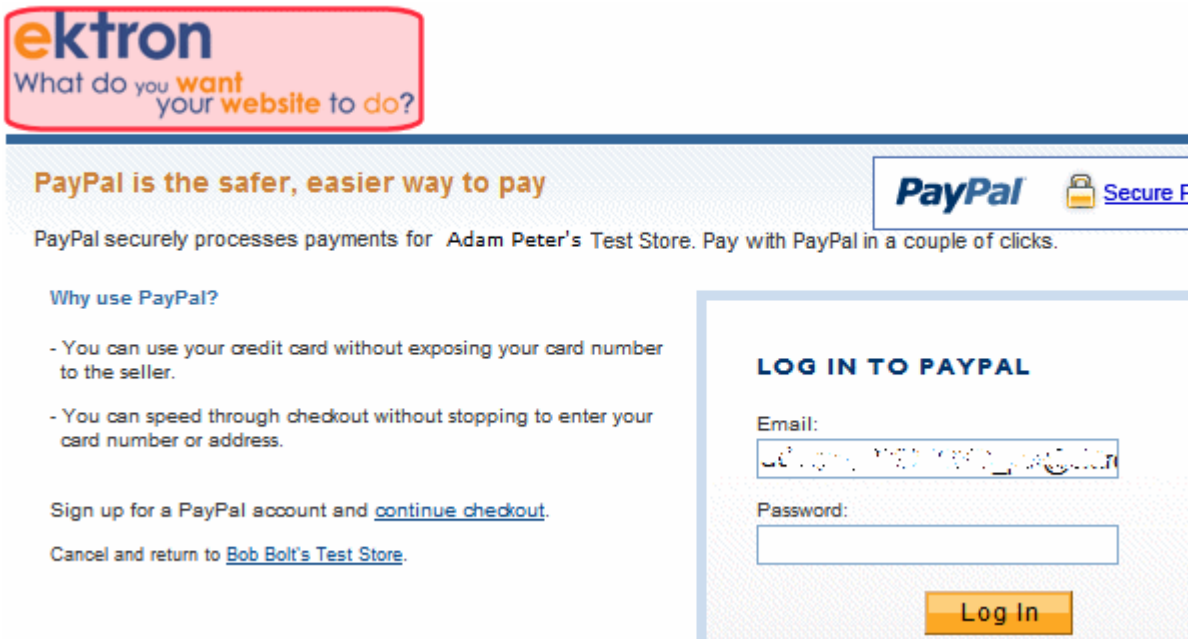
1. **Ektron CMS400.NET Workarea > Modules > Commerce > Configuration > Payment Options**.
2. Click **Action > Edit Payment options**.
3. Check **PayPal**.



4. Click the Save button ( ).

Customizing the PayPal Page

If you are using **Ektron CMS400.NET**'s sample site and PayPal is enabled, the login screen contains an Ektron logo for demonstration purposes.


ektron
What do you want your website to do?
PayPal is the safer, easier way to pay
PayPal
Secure
PayPal securely processes payments for Adam Peter's Test Store. Pay with PayPal in a couple of clicks.
Why use PayPal?
- You can use your credit card without exposing your card number to the seller.
- You can speed through checkout without stopping to enter your card number or address.
Sign up for a PayPal account and continue checkout.
Cancel and return to Bob Bolt's Test Store.
LOG IN TO PAYPAL
Email:
Password:
Log In

You can replace the logo using the following property of the web config's `providers/add name="PayPal"` element.

```
  <EktronPaymentGateway  defaultProvider="Automatic">
    <providers>
      <add name="Manual" type="Ektron.Cms.Commerce.Providers.Payment.Manua
      <add name="PayFlow" type="Ektron.Cms.Commerce.Providers.Payment.PayF
      <add name="AuthorizeNet" type="Ektron.Cms.Commerce.Providers.Payment
      <add name="PayPal" type="Ektron.Cms.Commerce.Providers.Payment.PayPa
PayPalUser="ada.pe_1239294207_biz_api1.ektron.com" PayPalPwd="1239294220"
PayPalSignature="A9rSfaZMiUWCVwkKf3v4ZS8RUCwyA08VaO6cy27U.A2xRGZMUviBfBK2"
CheckoutUrl="https://www.sandbox.paypal.com/cgi-bin/webscr" CheckoutTestUr
NVPUrl="https://api-3t.sandbox.paypal.com/nvp" NVPTestUrl="https://api-3t.
apiparamHDRIMG="https://ektron.com/images/homepage-logo-small.jpg" />
    </providers>
  </EktronPaymentGateway>
```

To change the logo, change the referenced image.

To learn how to customize other aspects of the page, see PayPal's "Express Checkout Integration Guide" section "PayPal Page Style." (https://cms.paypal.com/cms_content/en_US/files/developer/PP_ExpressCheckout_IntegrationGuide.pdf)

When setting values in the web.config's `providers/add name="PayPal"` element, prefix any variable with `apiparam`. For example, to set the header background color, enter `apiparamHDRBACKCOLOR="FFF666"`.

Payment Gateway

A payment gateway is a "service that automates the payment transaction between a shopper and merchant. It is usually a third-party service that processes, verifies, and accepts or declines credit card transactions or checks on behalf of the merchant through secure Internet connections." `(source: webopedia)`

Ektron CMS400.NET provides two standard payment gateways authorize.net and Payflow, along with manual. The manual gateway accepts all credit cards. In this case, the merchant emails the credit card information to the credit card company.

NOTE Details on how to implement a custom Payment Gateway can be found in the Ektron CMS400.NET Developer Manual section "Customizing eCommerce" > "Payment Gateway Provider."

Within **Ektron CMS400.NET**, a gateway can support credit cards, checks, or both, depending on how you implement it.

Ektron CMS400.NET lets you edit information on any provided gateway as well as create a new one.

See Also:

- ”How a Payment Gateway Works” on page 1124
- ”The Default Gateway” on page 1126
- ”Adding a Payment Gateway” on page 1127
- ”Editing a Payment Gateway” on page 1128
- ”Deleting a Payment Gateway” on page 1128
- ”Check Support” on page 1129
- ”Credit Card Types” on page 1132
- ”PayPal Support” on page 1113

How a Payment Gateway Works

Processing Credit Card Transactions

The following sequence explains how credit card transactions are typically processed. `(source: www.authorize.net)`

1. The payment gateway provider (PGP) receives secure transaction information and passes it via secure connection to the Merchant Bank’s Processor.
2. The Merchant Bank’s Processor submits the transaction to the Credit Card Interchange (a network of financial entities that manage credit card transactions).
3. The Credit Card Interchange sends the transaction to the customer’s Credit Card Issuer.
4. The Credit Card Issuer approves or declines the transaction, based on the customer’s available funds. It then passes the transaction results and, if approved, the appropriate funds back through the Credit Card Interchange.
5. The Credit Card Interchange relays the transaction results to the Merchant Bank’s Processor.
6. The Merchant Bank’s Processor relays the transaction results to PGP.

7. The PGP stores transaction results and sends them to the customer and/or the merchant. This communication process averages three seconds or less.
8. The Credit Card Interchange passes the transaction's funds from the Credit Card Issuer to the merchant's bank account.

Processing Check Transactions

The following sequence explains how a payment gateway processes checks. `(source: www.authorize.net)`

1. Customer authorizes merchant to charge his bank account for an amount.
2. Order and payment information is securely transmitted via the Internet to the payment gateway.
3. The transaction is accepted or rejected based on initial data validation and security criteria defined by the payment gateway.
4. If accepted, the transaction is sent to the ACH Network for settlement.
5. The ACH Network uses the transaction's bank account information to determine the bank that holds the customer's account (the RDFI).
6. The ACH Network instructs the RDFI to charge or refund the customer's account.
7. The RDFI transfers funds from the customer's account to the ACH Network. The RDFI also notifies the ACH Network of any returns (if funds could not be collected from the customer's bank account) or chargebacks (if a customer disputes a purchase).
8. The ACH Network transfers funds for the transaction to the payment gateway's bank.
9. After a holding period, the payment gateway provider initiates a ACH transaction that deposits the funds into the merchant's bank account.

Establishing a Relationship with a Payment Gateway Provider

You need to set up an account with a third-party payment service before using a payment provider. This includes payment providers

such as Authorize.NET and PayFlow, which are included with CMS400.NET's eCommerce Module.

To do this with Authorize.Net, go to http://www.authorize.net/solutions/merchantsolutions/onlinemerchantaccount/.

To set up an account with PayFlow, go to https://www.paypal.com/cgi-bin/webscr?cmd=_payflow-gateway-overview-outside.

WARNING! Make sure your payment gateway supports all currencies that you want to enable.

Each payment gateway provider accepts configuration parameters. For example, Authorize.NET requires a username and password, while PayFlow requires a Username, password, vendor, and partner.

In addition, some payment gateways do not support subscription payments. This is something to consider if your site relies on subscriptions. *See Also:* "Creating a Subscription" on page 1181

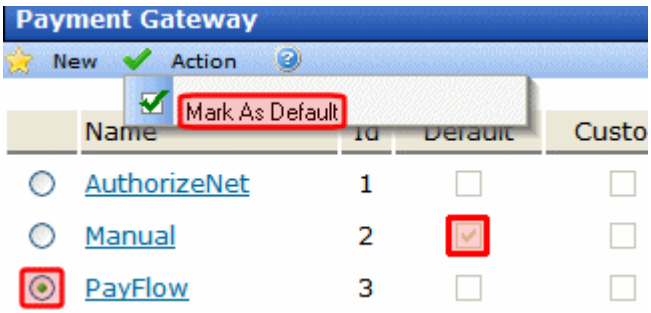
The Default Gateway

The eCommerce checkout process only uses the default gateway. Additional gateways are unused unless one is changed to be the default.

You cannot delete the default gateway. If you want to delete it, you must first make another gateway the default.

To change the default gateway, follow these steps.

1. Go to **Modules > Commerce > Configuration > Payment Options**.
2. The currently-defined default has a check in the **Default** column.
3. Click the radio button to the left of the gateway you want to make the default.



4. Click **Action > Mark as Default**.
5. A confirmation message appears. Click **OK**.

Adding a Payment Gateway

NOTE To learn how to create a new payment gateway provider, see the **Ektron CMS400.NET** Developer Manual section "Customizing eCommerce" > "Payment Gateway Provider" > "Creating a Custom Payment Gateway Provider."

To add a new payment gateway to **Ektron CMS400.NET**, follow these steps. *See Also:* "Payment Options" on page 1113

1. In **Ektron CMS400.NET**, go to **Modules > Commerce > Configuration > Payment Options**.
2. Click **New > Payment Gateway**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the name of the gateway.
Default	Check this box if this is the default gateway. If you do, and another gateway is currently the default, it is replaced by this one. *See Also:* "The Default Gateway" on page 1126
User ID	Enter your User ID. This ID will identify your account with this gateway provider.
Password	Enter the password for your account with this gateway provider.

Field	Description
Expand Custom Values	If this gateway provider needs additional fields of information, enter those values into the **Custom 1** and **Custom 2** fields.
Credit Cards	Check if this payment gateway accepts credit cards.
Checks	Check if this payment gateway accepts checks.

Editing a Payment Gateway

Follow these steps to edit a payment gateway. *See Also:* "Payment Options" on page 1113

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Payment Options**.
2. Click the payment gateway that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 1127.
5. Click the Save button ( ).

Deleting a Payment Gateway

Follow these steps to delete a payment gateway.

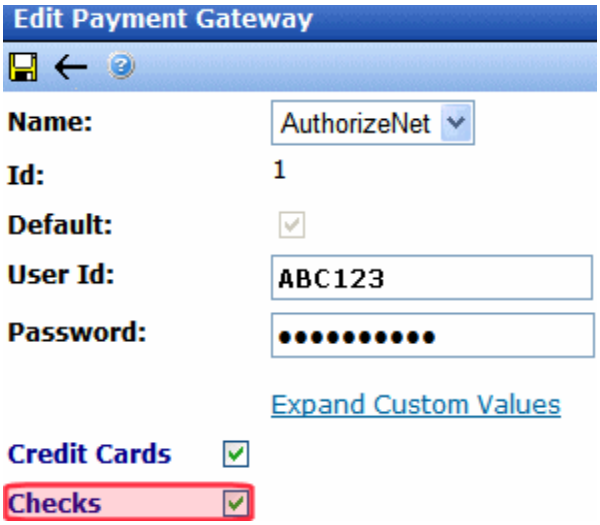
NOTE The default gateway cannot be deleted. If you want to delete it, you must first make another gateway the default.

See Also: "Payment Options" on page 1113

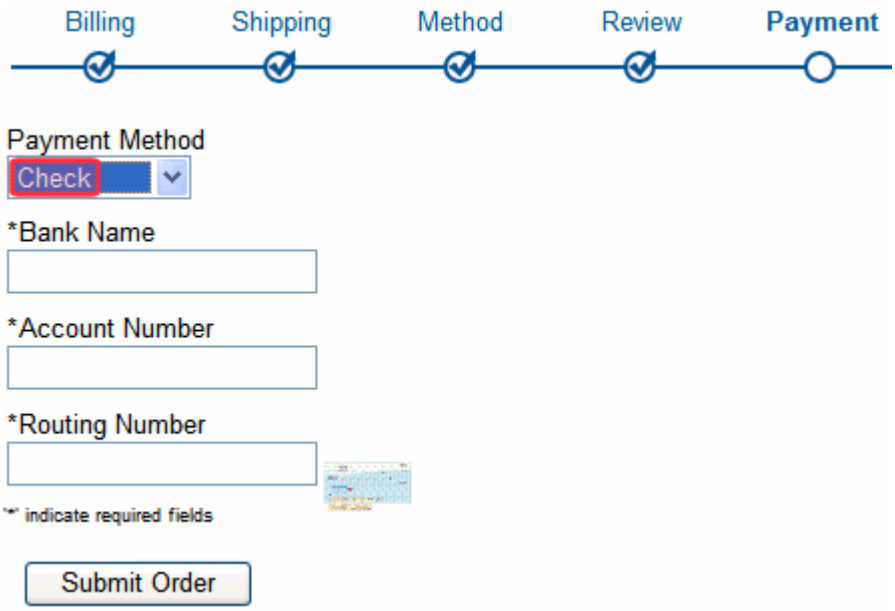
1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Payment Options**.
2. Click the payment gateway that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The payment gateway is deleted.

Check Support

Payment gateways generally offer two payment mechanisms: credit cards and checks. You can enable or disable check support for a gateway via the **Modules > Commerce > Configuration > Payment options > Edit Payment Gateway screen** (shown below).



When checks are enabled for the default payment gateway, a site visitor can choose to pay by **Check** on the payment screen. If check support is not enabled, the **Payment Method** field does not appear.



Check Support Integration Documentation

Use the following resources to familiarize yourself with integrating checks into your eCommerce site.

- Authorize.Net
  http://www.authorize.net/files/echecknetuserguide.pdf
- PayFlow
https://cms.paypal.com/cms_content/US/en_US/files/developer/PP_PayflowLink_Guide.pdf

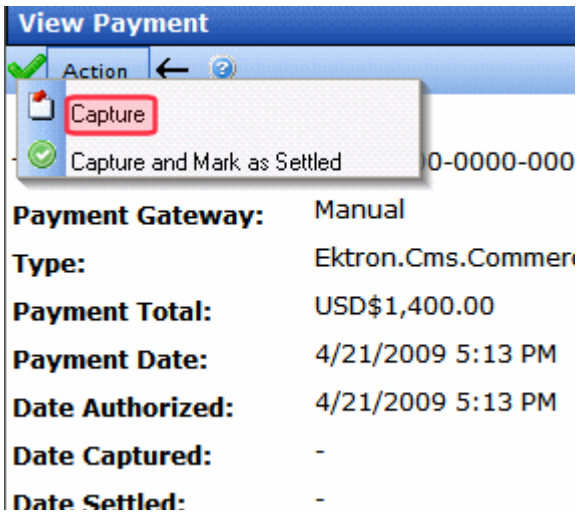
  See the chapter “Integrating TeleCheck Transactions.”

Effect of Check Payment on Order Processing

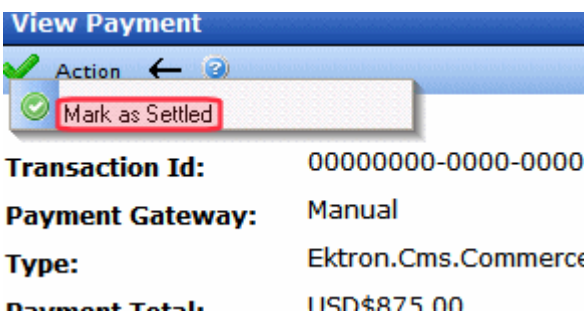
The following describes a typical sequence of events when processing a check for eCommerce payment.

However, **Ektron CMS400.NET** is very flexible and does not enforce this sequence. For example, you can enter a tracking number and mark an order shipped even though its payment has not been captured yet.

1. eCommerce user accesses the View Payment screen's **Capture** option, which submits a payment request to the customer's bank.

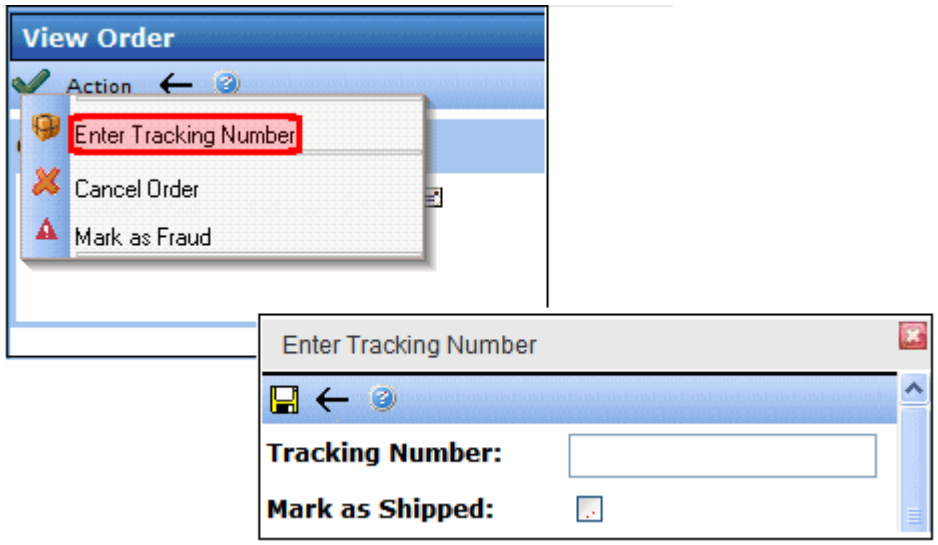


2. A few days later, the funds are transferred to the merchant's account.
3. The eCommerce user accesses the View Payment screen's **Mark as Settled** option to confirm that the funds have been received.



4. If the goods are *tangible*

   The eCommerce user ships the merchandise, using the View Payment screen's **Enter Tracking Number** option to insert the tracking number and confirm the shipment.



If the goods are *not* tangible

The workflow sends the customer an email with details about the purchase, such as how to download it.

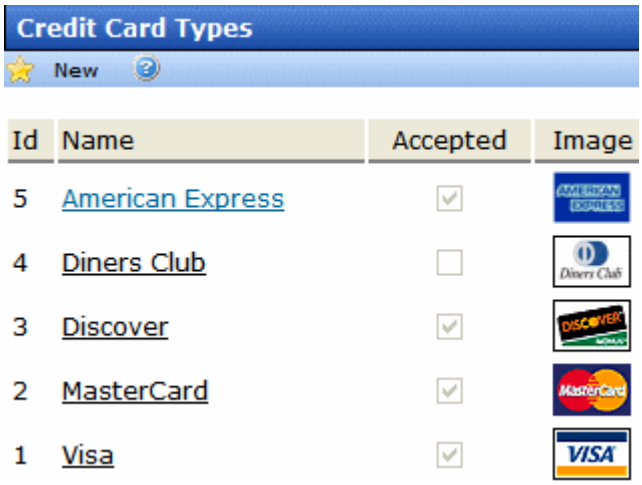
Credit Card Types

Use this screen to enter all types of credit cards that your eCommerce system may use. By default, **Ektron CMS400.NET**'s developer sample site provides the following card types.

- American Express
- Diners Club (not accepted by default)
- Discover
- MasterCard
- Visa
- Solo
- Maestro

NOTE If Solo and Maestro are enabled, additional fields appear on the Checkout server control to collect required information.

You can edit the information provided for these types or enter a new one.

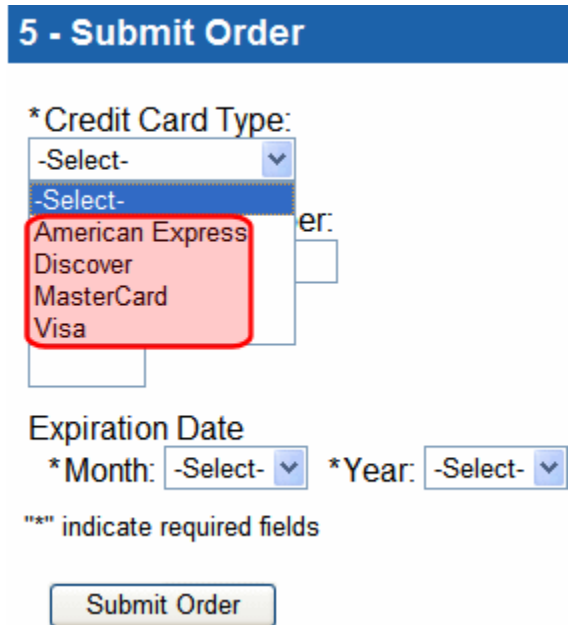


See Also:

- "Where Credit Card Types are Used" on page 1133
- "Creating a Credit Card Type" on page 1134
- "Editing a Credit Card Type" on page 1136
- "Deleting a Credit Card Type" on page 1137

Where Credit Card Types are Used

During the checkout process (managed by the Checkout server control), screen 5 (**Submit Order**) has a dropdown list of all enabled credit cards. See below.

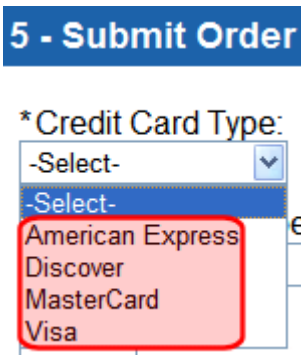


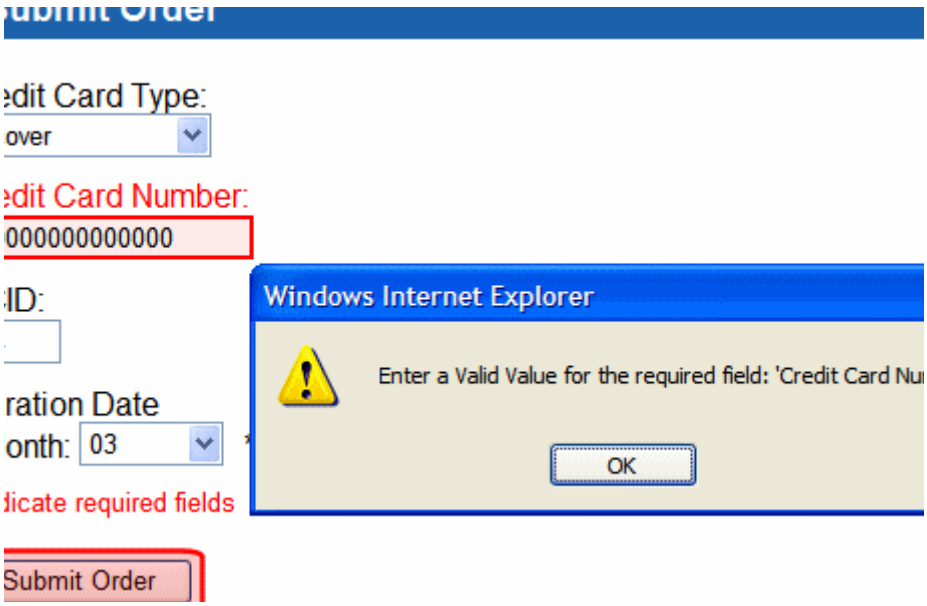
Creating a Credit Card Type

To create a new credit card within **Ektron CMS400.NET**, follow these steps.

1. In **Ektron CMS400.NET**, go to **Modules > Commerce > Configuration > Credit Card**.
2. Click **New > Credit Card**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter the credit card's name.

Field	Description
Accepted	Check this box if site visitors can use this card to make purchases on your Web site. Only Accepted cards appears in the Check out procedure > Submit Order screen's **Credit Card Type** dropdown, as shown below. 
Image	Use this field to specify an image for the credit card. The image does not appear on the standard checkout screen. But it is a field in the XML, so you can enable it using an XSLT. **Adding or Changing the Image** If you are entering a new credit card image or editing an existing one, follow these steps. **Prerequisite:** The image resides on your computer. 1. Click **Change**. 2. The Library Upload screen appears. 3. Click the Add button ( ). 4. Click Browse and navigate to the folder that contains the image. 5. Choose the image. 6. Assign a **Title**. 7. Click the Add Library button ( ). 8. The image appears on the screen.

Field	Description
Regex	A Regex expression is a simple way to validate a credit card account number. (*See Also:* http://regexlib.com/.) Validation occurs when a site visitor completes the Checkout procedure's Submit Order screen, as shown below.  Regex prevents the submission of invalid account numbers to a payment gateway, which may charge a fee for such failures. **Ektron CMS400.NET** provides as Regex expression for the credit cards supplied with medical sample site. You can modify them as needed. If you enter a new credit card, you can enter a Regex expression for it.

Editing a Credit Card Type

Follow these steps to edit a Credit Card Type. *See Also:* "Credit Card Types" on page 1132

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Credit Card**.
2. Click the Credit Card Type that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 1134.

5. Click the Save button ( ).

Deleting a Credit Card Type

Follow these steps to delete a Credit Card Type. *See Also:* ”Credit Card Types” on page 1132

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Configuration > Credit Card**.
2. Click the Credit Card Type that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The Credit Card Type is deleted.

Messages

Ektron’s eCommerce feature provides a messaging feature that can notify a purchaser when these events occur:

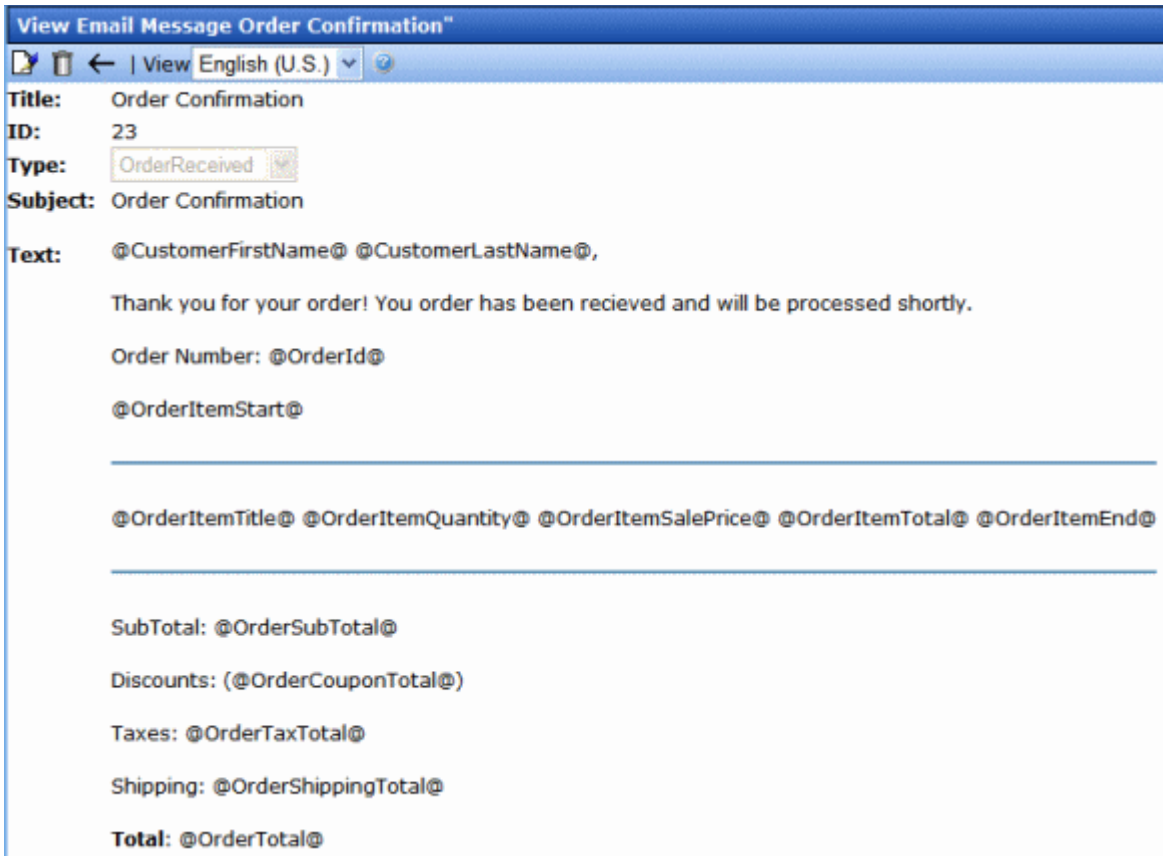
- Order is submitted
- Order is cancelled
- Order is shipped

Each message has a unique type that corresponds to an event. The message types are

- OrderReceived
- OrderCancelled
- Order Shipped

You can create any number of messages for each event, assigning one as the default. Only the default message is sent when the corresponding event occurs.

Here is a sample message as set up within **Ektron CMS400.NET**.



Here is the same message as delivered to a recipient's inbox.

From: admin@ektron.com [mailto:admin@ektron.com]
Sent: Monday, November 17, 2008 4:17 PM
To: Bob Smith
Subject: Order Confirmation

Application Administrator,

Thank you for your order! You order has been received and will be processed shortly.

Order Number: 10007

Atrium Lounge Chair and Ottoman 3 @ $400.00 each for a total of $1,200.00

Atrium Table 2 @ $150.00 each for a total of $300.00

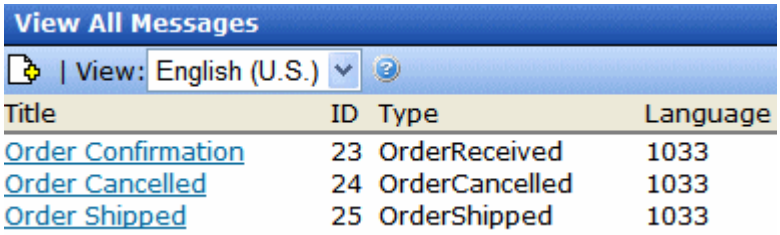
SubTotal: $1,500.00
Discounts: ($0.00)
Taxes: $0.00
Shipping: $250.00
Total: $1,750.00

See Also:

- "How Messages are Created and Generated" on page 1139
- "Creating or Editing an eCommerce Message" on page 1140

How Messages are Created and Generated

Ektron CMS400.NET provides sample text for each type of message. To view and edit a message, go to Ektron CMS400.NET **Workarea > Modules > Commerce > Configuration > Messages**.



The Message Type determines the event that causes a message to be sent. For example, the *Orderreceived* message is sent to a purchaser when he submits an order.

If regular content notification emails are being generated, the site visitor provided a valid email address, and a message has been defined for the event, emails are sent as eCommerce events occur. No additional set up is required.

NOTE eCommerce messages are distributed in the same way that content notification emails are. For information on setting this up, see the Ektron CMS400.NET Setup manual > "Configuring E-Mail for Tasks and Content."

Creating or Editing an eCommerce Message

1. Go to **Workarea > Modules > Commerce > Configuration > Messages**.
2. If a message of the type you want to create already exists, select it. Otherwise, click the Add Message button ( ).
3. Assign a Title, Subject (for the email subject line), Message Type, and message text.

Message Variables

eCommerce message text can use the following variables to retrieve order information from the database into the message text.

Variable	Description
@CustomerFirstName@	Customer's first name
@CustomerLastName@	Customer's last name
@OrderId@	The order's ID number
@OrderSubTotal@	The order's subtotal, that is the amount of all ordered items prior to shipping costs, taxes, and coupon discounts

Variable	Description
@OrderTotal@	The order's final cost (which includes taxes, shipping, and coupon discounts)
@OrderShippingTotal@	The order's shipping cost
@OrderCouponTotal@	The order's coupon discounts
@OrderTaxTotal@	The order's tax amount
@OrderItemTitle@	The title of any item on the order
@OrderItemSalePrice@	The sale price of any item on the order
@OrderItemQuantity@	The quantity of any item on the order
@OrderItemTotal@	The total cost of one item. For example, if `orderItemSalePrice` = $10 and `orderItemQuantity` = 2, `orderItemTotal` = $20.

@OrderItemStart@ and @OrderItemEnd@	Use the start and end markers to show information for all ordered items.
	The markers show no information by themselves. Instead, they repeat the variables between them for every item on the order.
	So, for example, assume an order has 10 items, and your message looks like this:
	`@OrderItemStart@`
	`@OrderItemTitle@`
	`@OrderItemQuantity@`
	`@OrderItemSalePrice@`
	`@OrderItemTotal@`
	`@OrderItemEnd@`
	The message prints the title, quantity, sale price, and total for each item on the order.

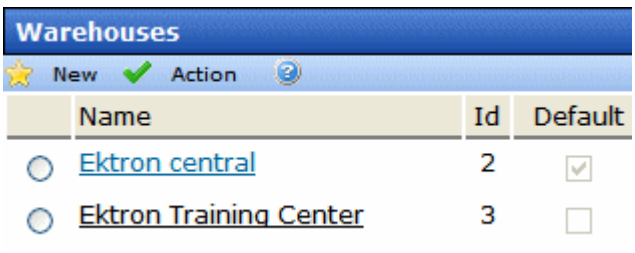
@TrackingUrl@	The link to a Web page that tracks your package. It is usually a combination of the shipper's URL and the tracking number.

eCommerce Shipping Screens

- ”Warehouse” on page 1142
- ”Packages” on page 1145
- ”Shipping Methods” on page 1147

Warehouse

Use the Warehouses screen to enter information about warehouses that stock your catalog entries. eCommerce uses this location to determine the “from” address when calculating shipping costs.



Only the default warehouse is used by the checkout process. Additional warehouses are unused until they are made the default. *See Also:* ”Changing the Default Warehouse” on page 1143

Prerequisite: Regions and countries must be set up. *See Also:* ”Regions” on page 1101

See Also:

- ”Creating a Warehouse” on page 1143
- ”Changing the Default Warehouse” on page 1143
- ”Editing a Warehouse” on page 1144
- ”Deleting a Warehouse” on page 1144

Creating a Warehouse

To create a new warehouse within **Ektron CMS400.NET**, follow these steps. *See Also:* ”Warehouse” on page 1142

1. In **Ektron CMS400.NET**, go to **Modules > Commerce > Shipping > Warehouses**.
2. Click **New > Warehouse**.
3. Use the following table to complete the screen.

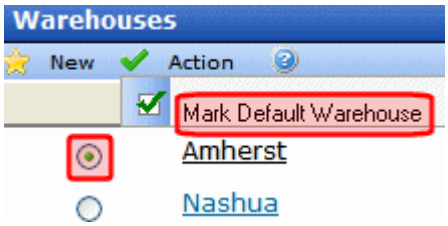
Field	Description
Name	Enter the warehouse’s name.
Street1, Street2	Enter the warehouse’s street address.
City	Enter the warehouse’s city.
Postal Code	Enter the warehouse’s postal code.
Country	Select the warehouse’s country from the pull-down list.
State/Province	Select the warehouse’s state or province from the pull-down list.
Default Warehouse	This box indicates if this is the default warehouse. If you want to make this warehouse the default, use the Mark as Default toolbar button ( ) Only the default warehouse is used by the checkout process. Additional warehouses are unused until they are made the default.

4. Click the Save button ( ).

Changing the Default Warehouse

To change the default warehouse, follow these steps.

1. Go to **Ektron CMS400.NET Workarea** > **Modules > Commerce > Shipping > Warehouses**.
2. Click the radio button next to the warehouse that you want to make the default.
3. Click **Action > Mark Default Warehouse**.



NOTE You can also specify a warehouse as the default via the Edit Warehouse screen's **Mark Default Warehouse** toolbar button .

4. A confirmation dialog appears. Click **OK**.

Editing a Warehouse

Follow these steps to edit a warehouse. *See Also:* "Warehouse" on page 1142

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Warehouses**.
2. Click the warehouse that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 1143.
5. Click the Save button ( ).

Deleting a Warehouse

Follow these steps to delete a warehouse. *See Also:* "Warehouse" on page 1142

NOTE You cannot delete the default warehouse. However, you can designate another warehouse as the default, then delete the one that was the default. *See Also:* "Changing the Default Warehouse" on page 1143

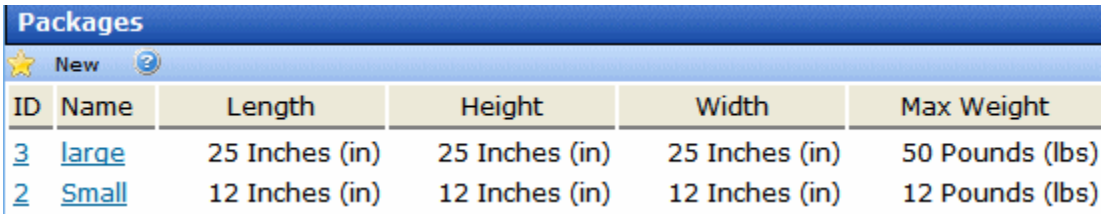
1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Warehouse**.
2. Click the warehouse that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.

5. The warehouse is deleted.

Packages

The Packages screen lets you define standard sizes of packaging. Use it to define every package size that your shipping department uses to ship your products.

If you use a provider such as UPS® or FedEx®, it is likely they provide boxes.



ID	Name	Length	Height	Width	Max Weight
3	large	25 Inches (in)	25 Inches (in)	25 Inches (in)	50 Pounds (lbs)
2	Small	12 Inches (in)	12 Inches (in)	12 Inches (in)	12 Pounds (lbs)

How Packaging Information Is Used

Each item in an order has size and weight dimensions. The shipping calculator uses this information to fit the order into the smallest-sized and fewest packages. It then passes packaging information (number, sizes and weight) to the shipping provider, which returns the order's shipping costs.

If a catalog entry's dimensions exceed all box sizes, eCommerce passes that product's dimensions to the shipping provider.

NOTE Some shipping providers, FedEx and UPS for example, have limits on the size & weight of packages they are willing to ship. If the size or weight exceeds their limits, shipping rates may not be returned when a site visitor is going through the checkout process. If shipping rates are not returned during checkout, an Application error is logged in the Event Viewer. This prevents a site visitor from continuing the checkout process.

See Also:

- "Size and Weight Units of Measure" on page 1146
- "Creating a New Package" on page 1146
- "Editing a Package" on page 1147

- "Deleting a Package" on page 1147

Size and Weight Units of Measure

Packages use size and weight measurements. By default, **Ektron CMS400.NET** uses English units of measure (inches and pounds). At the beginning of your eCommerce implementation, you can change to metric units of measure by updating the web.config file's `ek_measurementsystem` tag value to `metric`.

WARNING! After your eCommerce feature goes live, do *not* change the `ek_measurementsystem` value in web.config.

Creating a New Package

To create a new package, follow these steps. *See Also:* "Packages" on page 1145

1. Go to **Modules > Commerce > Shipping > Packages**.
2. Click **New > Package**.
3. Use the following table to complete the screen.

Field	Description
Name	Enter a text description of this package size.
Length	Enter the package's length in the units of measure that appear to the right (inches or centimeters). *See Also:* "Size and Weight Units of Measure" on page 1146
Height	Enter the package's height in the units of measure that appear to the right (inches or centimeters).
Width	Enter the package's width in the units of measure that appear to the right (inches or centimeters).
Max Weight	Enter the package's weight in the units of measure that appear to the right (pounds or kilograms).

4. Click the Save button ( ).

Editing a Package

Follow these steps to edit a package. *See Also:* "Warehouse" on page 1142

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Packages**.
2. Click the package that you want to edit.
3. Click the Edit button ( ).
4. Edit any of the fields, which are described in "Use the following table to complete the screen." on page 1146.
5. Click the Save button ( ).

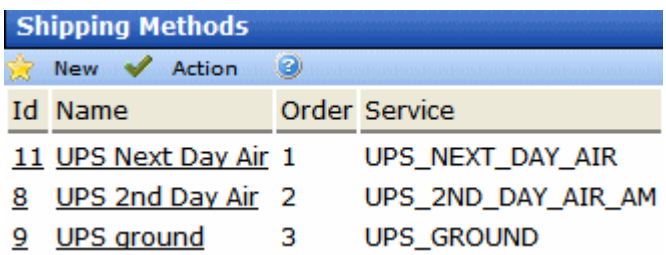
Deleting a Package

Follow these steps to delete a package. *See Also:* "Warehouse" on page 1142

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Packages**.
2. Click the package that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The package is deleted.

Shipping Methods

Use the Shipping Methods to define all choices your site visitors will have for delivering their purchases.



Prerequisites:

- Default warehouse with an address
- A default shipping provider is defined in the *siteroot*\shipment.config file

See Also:

- ”Defining Shipping Providers” on page 1148
- ”Defining the Default Shipping Provider” on page 1149
- ”Adding a Shipping Method” on page 1150
- ”Editing a Shipping Method” on page 1151
- ”Deleting a Shipping Method” on page 1151
- ”Changing the Order of the Shipping Method” on page 1151

Defining Shipping Providers

When you install **Ektron CMS400.NET**, several providers exist in the *siteroot*\shipment.config file:

- FedExShipmentProvider
- FlatRateShipmentProvider
- UPSShipmentProvider

However, the FedEx and UPS information is for testing purposes only. In order to use FedEx, UPS or another shipping provider, obtain the following information from them.

- service URL
- key
- password
- account number
- meter number
- transactionId

NOTE The above list can vary slightly for each provider.

Then, enter that information into shipment.config, following the format of providers already in the file.

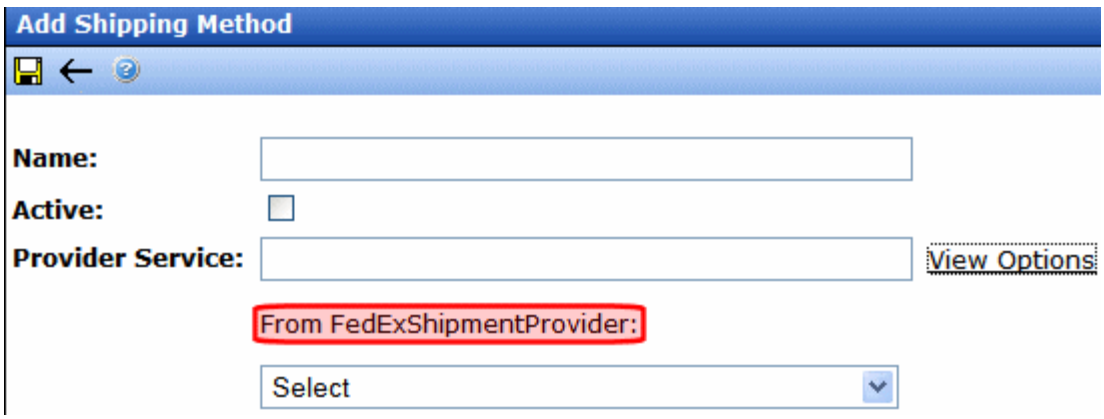
The `shipment.config` file also contains `name` and `type` properties for each provider (shown in red below).

```
name="FedExShipmentProvider"
type="Ektron.Cms.Commerce.Shipment.Services.FedExShipmentProvider, Ektron.Cms.Commerce"
```

The red text that you insert (above) is not important, but the two strings must match.

Defining the Default Shipping Provider

While you can define any number of shipping providers in the shipment.config file, only one can be active. The active provider appears on the **Modules > Commerce > Shipping > Methods > New > Shipping Method** screen when you click **View Options**.



Specify the default (active) shipping provider via the `defaultprovider` property (highlighted in red below) in *siteroot*`\shipment.config`.

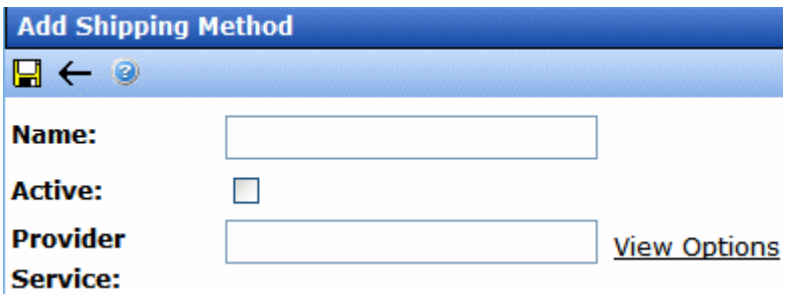
```
<?xml version="1.0" encoding="utf-8" ?>
<shipmentProvider defaultProvider="FedExShipmentProvider">
    <providers>
        <add name="FedExShipmentProvider" .
.
.</shipmentProvider>
```

Adding a Shipping Method

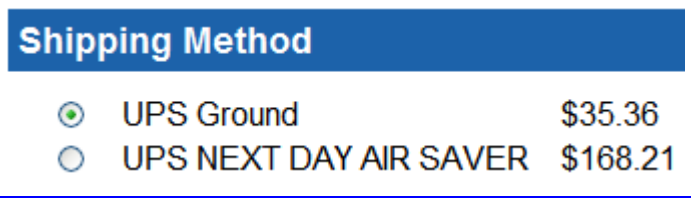
Use the Add Shipping Method screens to select shipping methods you will support. When a site visitor submits an order, these shipping choices appear on the Shipping screen. *See Also:* "Shipping Methods" on page 1147

To add shipping methods, follow these steps.

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Methods**.
2. Click **New > Shipping Method**.
3. The Add Shipping Method screen appears.



4. Use the following table to complete the screen.

Field	Description
Name	Enter the name of the shipping method. Site visitors select a shipping method for their order using this name (see example below).  Tip! First click **View Options** and select a shipping method. Then enter its name here.
Active	Check this box if you want site visitors to be able to select this shipping method.

Field	Description
Provider Service	As explained in "Defining the Default Shipping Provider" on page 1149, a default shipping provider is defined in your site's shipment.config file. To view all methods offered by that provider, click **View Options**. Then, select from the dropdown list that appears.

Editing a Shipping Method

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Methods**.
2. Click the Shipping Method that you want to edit.
3. The View Shipping Method screen appears.
4. Click the Edit button ( ).
5. See "Use the following table to complete the screen." on page 1150.

Deleting a Shipping Method

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Methods**.
2. Click the Shipping Method that you want to edit.
3. The View Shipping Method screen appears.
4. Click the Delete button ( ).

Changing the Order of the Shipping Method

Each shipping method you define has an **Order** field. This determines the sequence in which shipping methods appear on the Shipping Rates screen when a site visitor is submitting an order.

The shipping method with **1** in the **Order** field appears at the top of the list.

By default, every shipping method's order is set to **1**. To set a sequence for shipping methods, follow these steps

1. Go to **Ektron CMS400.NET** Workarea > **Modules > Commerce > Shipping > Methods**.
2. Click **Action > Reorder**.
3. Use the selection bar and arrows to arrange methods in the desired sequence.

4. Click **Action > Save**.

eCommerce Tax Screens

eCommerce provides a set of tax screens in the **Ektron CMS400.NET** Workarea that lets you

- set up tax classes (for example, goods, services, tobacco)
- define tax rates for these geographic entities (from most to least specific)

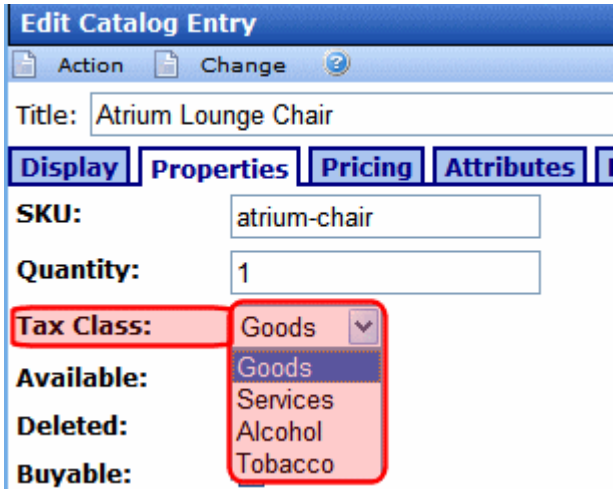
  - postal code
  - region
  - country

See Also:

- ”How an Order’s Tax Amount is Calculated” on page 1153
- ”The Tax Class Screens” on page 1155
- ”Postal Tax Tables” on page 1157
- ”Regional Tax Tables” on page 1159
- ”Country Tax Tables” on page 1161

How an Order’s Tax Amount is Calculated

During checkout, **Ektron CMS400.NET** tries to find a tax rate for each catalog entry’s Tax Class (shown below) and the shipping address’s postal code.



The following table describes what happens next.

Ektron CMS400.NET checks for this tax	**If it finds a tax rate for geographic entity**	**If it does *not* find a tax rate for geographic entity**
1. Postal code	It adds that amount and stops. For example • an item costs $100.00 • the *postal code* tax rate = 5% • the adjusted cost is $105.00	It checks the customer's address for a regional tax code.
2. Region	It adds that amount and stops. For example • an item costs $100.00 • the *regional* tax rate = 7% • the adjusted cost is $107.00	It checks the customer's address for a country tax code.
3. Country	It adds that amount. For example • an item costs $100.00 • the *country* tax rate = 10% • the adjusted cost is $110.00	No tax is added to the order.

TIP! If a postal zone has several taxes (for example, a local tax and a regional tax), build the combined percentage into the postal code tax. So, assume New York City has a 4% tax, and New York state has a 3% tax. In this case, enter a combined total of 7% into all postal zones within New York City. *See Also:* "The Tax Class Screens" on page 1155

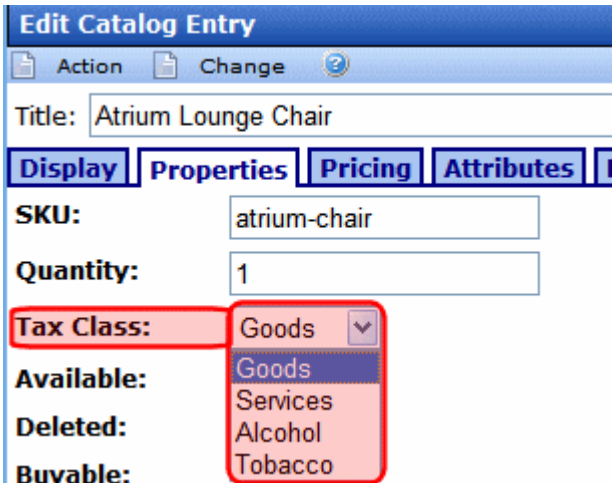
The Tax Class Screens

Use the Tax Class screen to define all classes of catalog entries that can be taxed. When you install eCommerce, the following tax classes are installed.

- alcohol
- goods
- service
- tobacco

You can modify or delete these, and add new classes at any time.

You assign a tax class to a catalog entry via its **Properties** tab's **Tax Class** field (shown below).



See Also:

- "How an Order's Tax Amount is Calculated" on page 1153
- "eCommerce Tax Screens" on page 1153

- ”Creating a New Tax Class” on page 1156
- ”Editing a Tax Class” on page 1156
- ”Deleting a Tax Class” on page 1157

Creating a New Tax Class

To create a new tax class, follow these steps. *See Also:* ”The Tax Class Screens” on page 1155

1. Go to **Modules > Commerce > Tax > Classes**.

2. Click **New > Tax Class**.
3. Enter the name of the tax class.
4. Press the Save button ( ).

Editing a Tax Class

To edit a tax class, follow these steps. *See Also:* ”The Tax Class Screens” on page 1155

1. Go to **Modules > Commerce > Tax > Classes**.
2. Click the Tax Class that you want to edit.
3. Click the Edit button ( ).
4. Edit the name of the tax class.
5. Press the Save button ( ).

Deleting a Tax Class

IMPORTANT! If a tax class has been assigned to a catalog entry that appears on any order, the Delete button does not appear.

To delete a tax class, follow these steps.

1. Go to **Modules > Commerce > Tax > Classes**.
2. Click the Tax Class that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The Tax Class is deleted.

Postal Tax Tables

Use postal code tax tables to identify local areas (cities, counties, etc.) that apply taxes to eCommerce catalog entries. The areas are identified by their postal code. For example, London, England taxes alcohol delivered to addresses within it.

You only need to create a postal tax table if the area that applies the tax is smaller than a country's geographical *regions* (states, provinces, etc.). If an entire region applies a tax, use a regional tax table.

See Also:

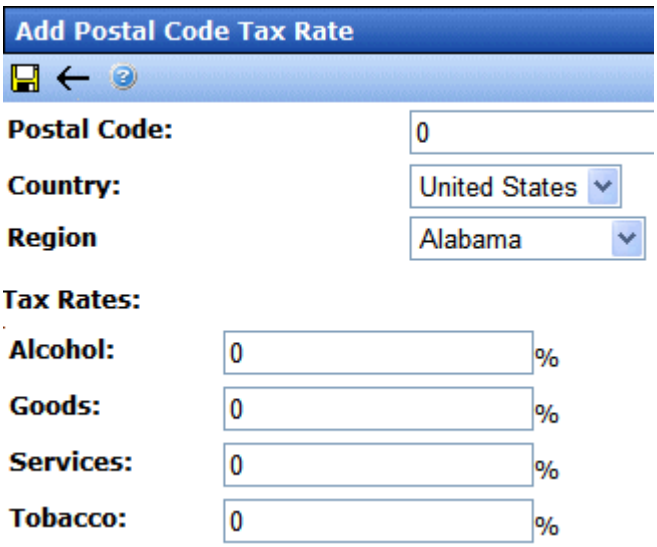
- "How an Order's Tax Amount is Calculated" on page 1153
- "eCommerce Tax Screens" on page 1153
- "Creating a New Postal Code Tax Table" on page 1157
- "Editing a Postal Code Tax Table" on page 1159
- "Deleting a Postal Code Tax Table" on page 1159

Creating a New Postal Code Tax Table

Prerequisite: The postal code's country and region are defined in the Regions and Countries screens

To create a new postal code tax table, follow these steps. *See Also:* "Postal Tax Tables" on page 1157

1. Go to **Modules > Commerce > Tax > Postal Tax Tables**.
2. Click **New > Postal Code**.



3. Use the following table to complete the screen.

Field	Description
Postal Code	Enter the postal code for which you want to enter a tax rate. If this is for a US state, the code must consist of five or nine digits.
Country	Enter the country in which the postal code resides.
Region	Enter the geographic region (for example, state or province) in which the postal code resides.
Tax Rates: Alcohol Goods Services Tobacco Note: Your list may vary.	For any tax class, enter a tax rate as a whole number. For example, if the tax is 7%, enter **7**. *See Also:* "The Tax Class Screens" on page 1155

4. Press the Save button ( ).

Editing a Postal Code Tax Table

To edit a postal code tax table, follow these steps. *See Also:* "Postal Tax Tables" on page 1157

1. Go to **Modules > Commerce > Tax > Postal Tax Tables**.
2. Click the ID of the tax table that you want to edit.
3. Click the Edit button ( ).
4. Edit the fields as needed. See "Use the following table to complete the screen." on page 1158
5. Press the Save button ( ).

Deleting a Postal Code Tax Table

To delete a postal code tax table, follow these steps.

1. Go to **Modules > Commerce > Tax > Postal Tax Tables**.
2. Click the ID of the tax table that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The postal code tax table is deleted.

Regional Tax Tables

Use regional tax tables to identify regions (states, provinces, etc.) that apply taxes to eCommerce catalog entries. For example, within the United States of America, the state of New Jersey applies a 5% tax on goods purchased on the internet and shipped to it.

You only need to define a regional tax table if the area that applies the tax is smaller than a country. If an entire country applies a tax, use a country tax table.

See Also:

- "How an Order's Tax Amount is Calculated" on page 1153
- "eCommerce Tax Screens" on page 1153
- "Editing a Regional Tax Table" on page 1160

- ”Deleting a Regional Tax Table” on page 1161

Editing a Regional Tax Table

A regional tax table is automatically created for every existing region. By default, all tax rates are zero (0). To change any tax rate, follow these steps. *See Also:* ”Regional Tax Tables” on page 1159

1. Go to **Modules > Commerce > Tax > Regional Tax Tables**.
2. Select the region for which you want to create a tax table.
3. The View Region Tax Rate screen appears.
4. Click the Edit button ( ).

5. Use the following table to complete the screen.

Field	Description
Name	Select the region for which you want to enter a tax rate.
Tax Rates: Alcohol Goods Services Tobacco Note: Your list may vary.	For any tax class, enter a tax rate. *See Also:* "The Tax Class Screens" on page 1155

6. Press the Save button ( ).

Deleting a Regional Tax Table

To delete a regional tax table, follow these steps.

1. Go to **Modules > Commerce > Tax > Regional Tax Tables**.
2. Click the ID of the tax table that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The regional tax table is deleted.

Country Tax Tables

Use country tax tables to identify nations that apply taxes to eCommerce catalog entries. For example, Ethiopia applies a 5% tax on goods purchased on the internet and shipped to it.

See Also:

- "How an Order's Tax Amount is Calculated" on page 1153
- "eCommerce Tax Screens" on page 1153
- "Editing a Country Tax Table" on page 1162
- "Deleting a Country Tax Table" on page 1163

Editing a Country Tax Table

A country tax table is automatically created for every existing country. By default, all tax rates are zero (0). To change any country tax rate, follow these steps. *See Also:* "Country Tax Tables" on page 1161

1. Go to **Modules > Commerce > Tax > Country Tax Tables**.
2. Select the country for which you want to edit a tax table.
3. The View Country Tax Rate screen appears.
4. Click the Edit button ( ).

5. Use the following table to complete the screen.

Field	Description
Name	Select the country for which you want to enter a tax rate.

Field	Description
Tax Rates: Alcohol Goods Services Tobacco Note: Your list may vary.	For any tax class, enter a tax rate. *See Also:* "The Tax Class Screens" on page 1155

6. Press the Save button ( ).

Deleting a Country Tax Table

To delete a country tax table, follow these steps.

1. Go to **Modules > Commerce > Tax > Country Tax Tables**.
2. Click the ID of the tax table that you want to delete.
3. Click the Delete button ( ).
4. A confirmation message appears. Click **OK**.
5. The country tax table is deleted.

eCommerce Products

As mentioned in ”Deploying eCommerce” on page 1090, you typically set up configuration screens before you build eCommerce products. Next, you build the products in the sequence listed below

1. ”Product Types” on page 1164
2. ”Creating a Catalog Folder” on page 1190
3. ”Creating a Catalog Entry” on page 1193

See Also:

- ”eCommerce Analytics” on page 1225
- ”eCommerce Recommendations” on page 1226

Product Types

Create a separate *product type* definition for each category of catalog entries that you sell. For example, you might have a product type for movies, another for books, a third for electronics, etc.

When thinking about creating new product types, the most significant differences are the **Class** field (described below) and the content page, which defines the XML Smart Form for products you will create of a Product Type.

See Also:

- ”Product Classes” on page 1165
- ”How Product Types Affect the Creation of Catalog Entries” on page 1165
- ”Creating a Product Type Step 1: Properties, Attributes & Media Defaults” on page 1167
- ”Creating a Product Type Step 2: Creating the Content Page” on page 1188

- "Deleting a Product Type" on page 1189

Product Classes

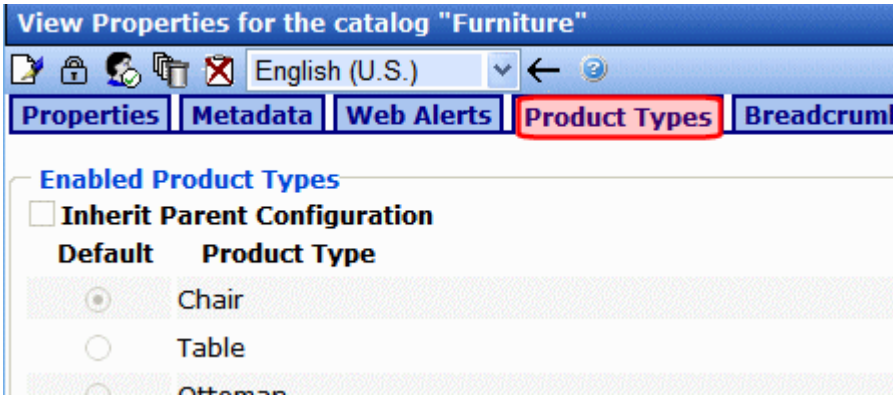
A catalog entry's product class affects site visitors' purchasing options. Classes are explained below.

Class	Description	Example
Kit	Let a site visitor select from any number of free-text options. Options can increase or decrease the overall price. *See Also:* "Creating a Kit" on page 1173	A computer whose price changes as a site visitor selects RAM, hard drive, monitor, etc.
Bundle	A catalog entry consisting of several other catalog entries bundled together. Its pricing, shipping, images, etc. are independent of the individual items. *See Also:* "Creating a Bundle" on page 1176	A living room set: couch, end tables and lamps. Instead of buying each item separately, the site visitor buys all for a "package" price.
Product	Simple or complex catalog entries. A complex product is a "wrapper" that provides links to related simple products. Each simple product has its own SKU, price, inventory data, etc. *See Also:* "Creating a Complex Product" on page 1178	A movie in three formats and prices: • VHS ($12.95) • DVD ($14.95) • Blu-ray ($17.95)
Subscription	A catalog entry which can provide access to designated site pages, and may billed on a recurring basis. *See Also:* "Creating a Subscription" on page 1181	Web site content that is only available to subscribed members

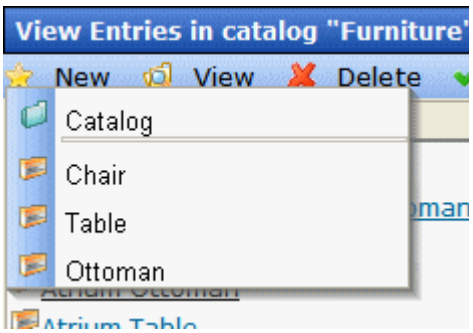
How Product Types Affect the Creation of Catalog Entries

Catalog folders generally contain the same kind of catalog entries, such as DVDs or digital cameras. Some information applied to a catalog folder is inherited by all entries in the folder.

After you create product types, apply appropriate ones to catalog folders using the Catalog Properties screen's **Product Types** tab (shown below).



Then, when creating a new catalog entry, you first navigate to a catalog folder. Next, click **New** and choose a product type assigned to the folder (shown below).



A product type determines the following aspects of the catalog entries based on it.

Catalog entry property	For more information, see
Product class	"Product Classes" on page 1165
Content page	"Creating a Product Type Step 2: Creating the Content Page" on page 1188
Attributes	"Attributes Tab" on page 1169

Catalog entry property	For more information, see
Media defaults (that is, size of thumbnail images added to a catalog entry)	"Media Defaults Tab" on page 1172

There are two steps to creating a product type.

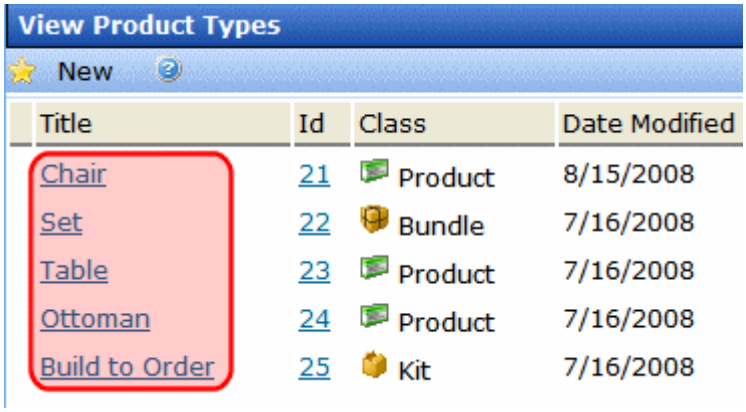
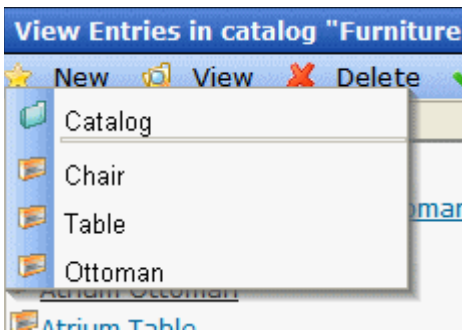
- "Creating a Product Type Step 1: Properties, Attributes & Media Defaults" on page 1167
- "Creating a Product Type Step 2: Creating the Content Page" on page 1188

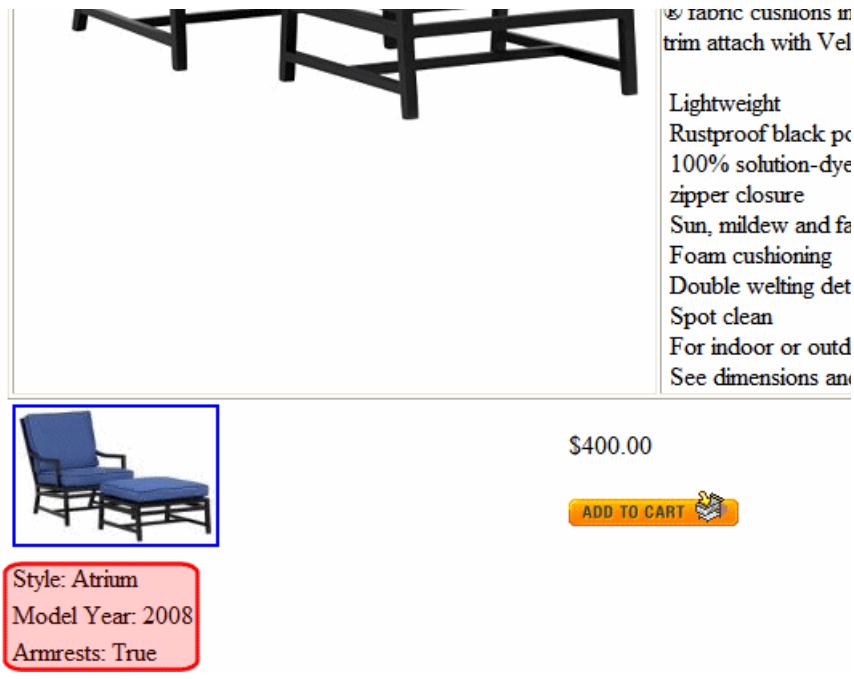
See Also: "Deleting a Product Type" on page 1189

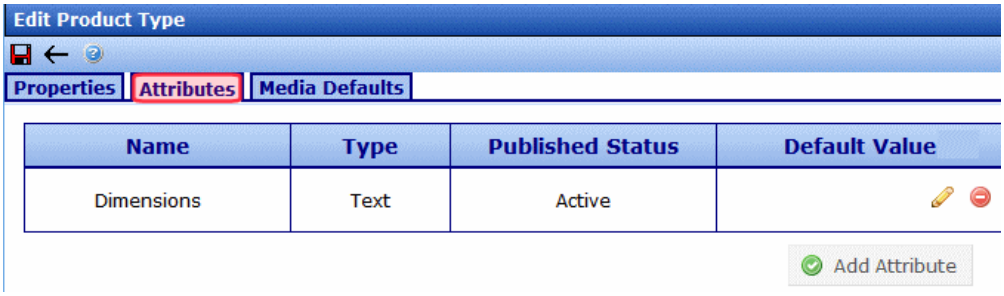
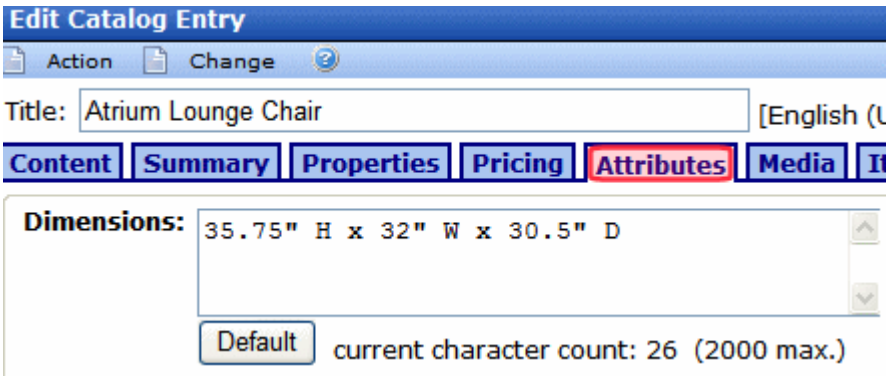
Creating a Product Type Step 1: Properties, Attributes & Media Defaults

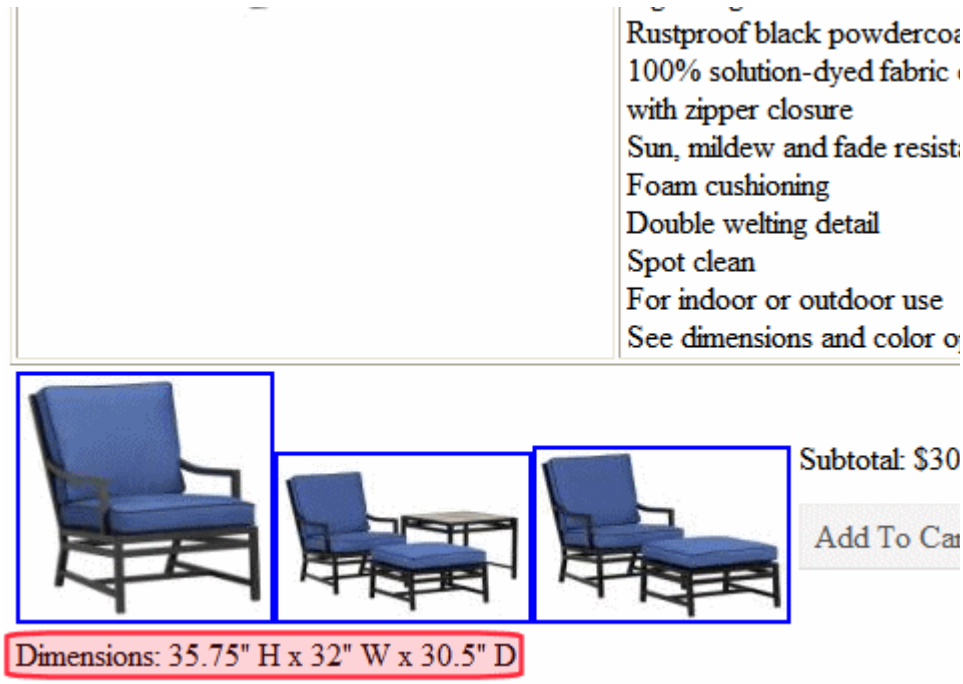
To create a product type, go **Workarea > Modules > Commerce > Catalog > Product Types > New > Product Type**. Use the following table to complete the Add Product Type screens.

Tab/Field	Description
Properties Tab	

Tab/Field	Description
Title	Give the product type a unique title. The title identifies this entry on the View Product Types screen.  Also, when creating a new catalog entry, users must pick a product type from the catalog's **New** menu (shown below). 
Description	Enter a description for the product type.
Class	Enter a class for the product type. *See Also:* "Product Classes" on page 1165

Tab/Field	Description
Attributes Tab	Define additional information about catalog entries based on this product type. By default, Attributes appear on the Product server control (illustrated below).  As another example, if the Product Type is for movies, attributes might be **Actors**, **Running Time**, **Rating**, **Year Released**, etc. Follow these steps to define a Product Type's attributes. 1. Click the Product Type **Attributes** tab. 2. Click the **Add Attribute** button. 3. Assign a name to the attribute, such as **color**. 4. Choose from these data types. •text •date •number •boolean (yes or no) 5. Click OK. *(continued on next page)*

Tab/Field	Description
Attributes Tab *(continued)*	For example, you want an attribute that describes a chair's dimensions. You create a text-based attribute for the Product Type you will use to add chairs to a catalog.  Then, whenever you add a new chair to the catalog, you enter its dimensions into the **Attributes** tab's **Dimensions** field. 

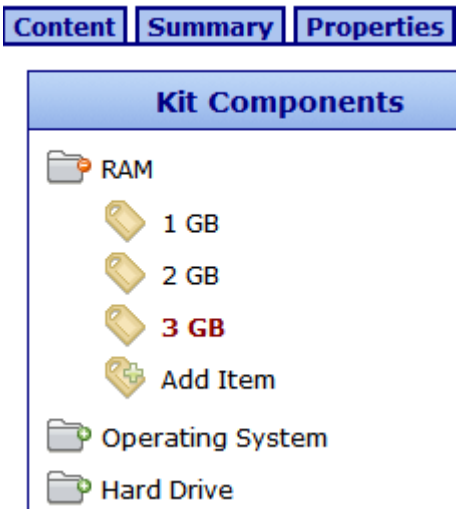
Tab/Field	Description
Attributes Tab *(continued)*	When a site visitor views the chair's product page, he sees the attribute text below the thumbnails.  **Attribute Statuses** Note: You can delete an attribute only if it is *not* applied to a catalog entry. If you try to delete an attribute applied to a catalog entry, it is marked "Inactive." Inactive attributes can no longer be assigned. • Active - Attribute can be assigned to catalog entries • Inactive - Attribute already assigned to one or more catalog entries, but can no longer be assigned. To make an attribute inactive, click the corresponding Mark for Delete button ( ). • Not Published - Attribute has been created but Product Type not saved yet • ~~Active~~ - Marked for delete. Attribute will be deleted when Product Type is saved.

Tab/Field	Description
Media Defaults Tab	If desired, enter sizes of thumbnail images. If you do, thumbnails are automatically generated for images (added on the **Media** tab) applied to catalog entries based on this product type. To add a new thumbnail size, click **Add Thumbnail**. To remove one, click the corresponding **Remove** button ( ). To edit a thumbnail, click the corresponding **Edit** button ( ). After making the edit, click the Save button ( ). **Viewing a Catalog Entry's Thumbnails** You can see a catalog entry's thumbnails by clicking its **Media** tab, then **View Thumbnails**. *See Also:* "Product Server Control, thumbnails" on page 1095

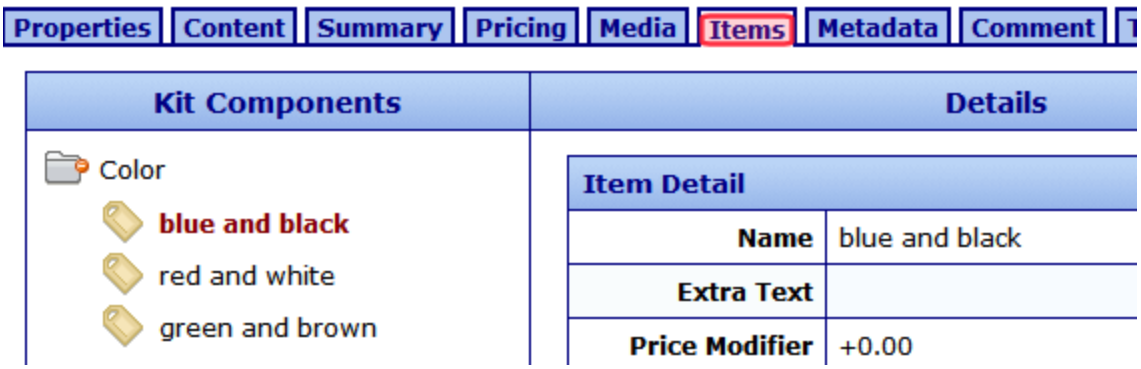
Creating a Kit

A kit is a type of catalog entry that allows a site visitor to select from free-text options, which can affect the item's price. The options can also be placed into logical groups.

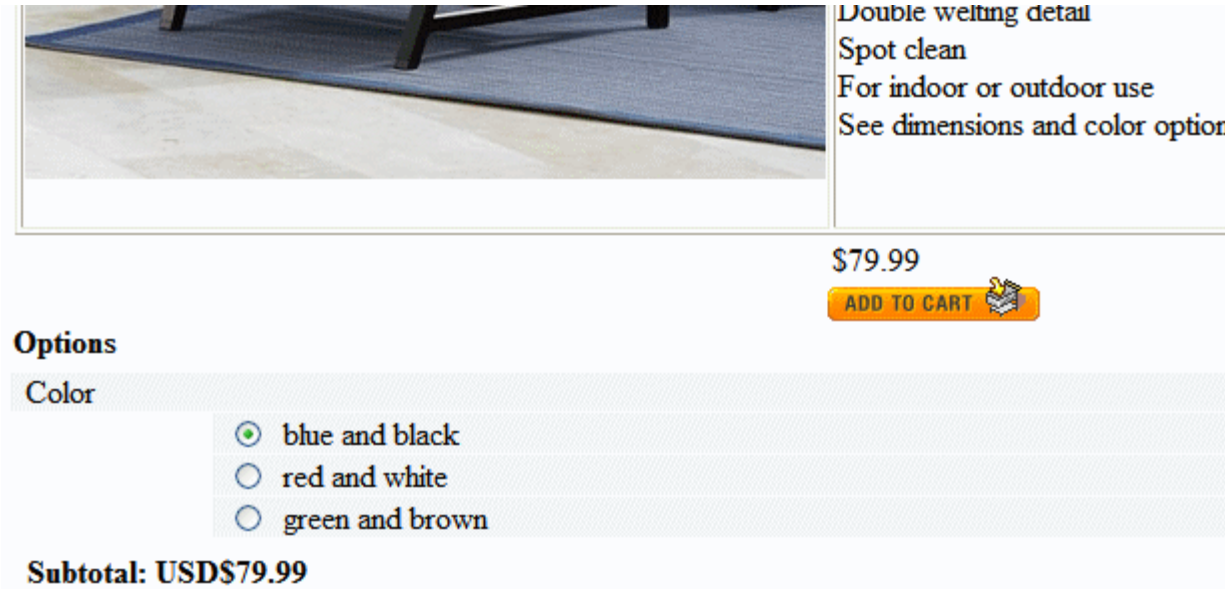
For example, if a catalog entry is a laptop computer, one group may let you enter options for RAM, another for operating system version, and a third could present hard drive options. This is illustrated below.



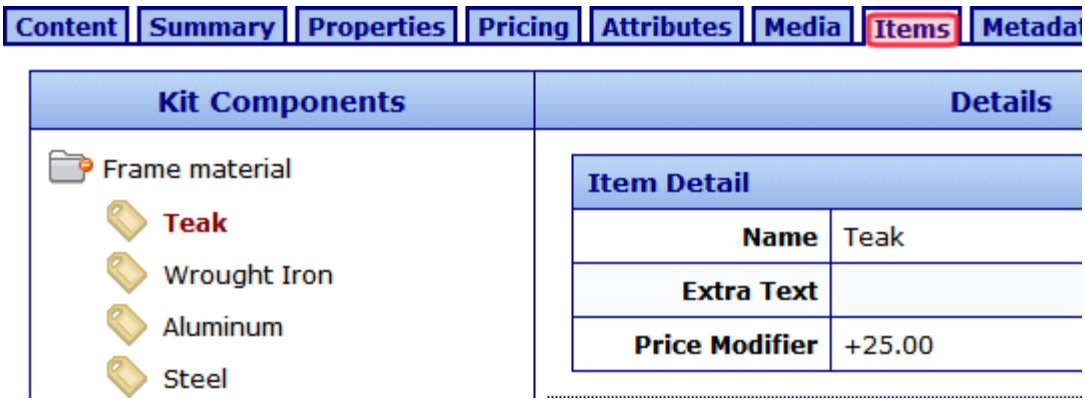
There is no limit to the number of groups you can add, nor the number of options in a group. All groups and options are simple text, created on a kit's **Items** tab as needed, and can accommodate a price modifier. The example below shows how to set up chair color combinations.



In this example, the options do *not* affect the price. Here is how the options appear on a product page.



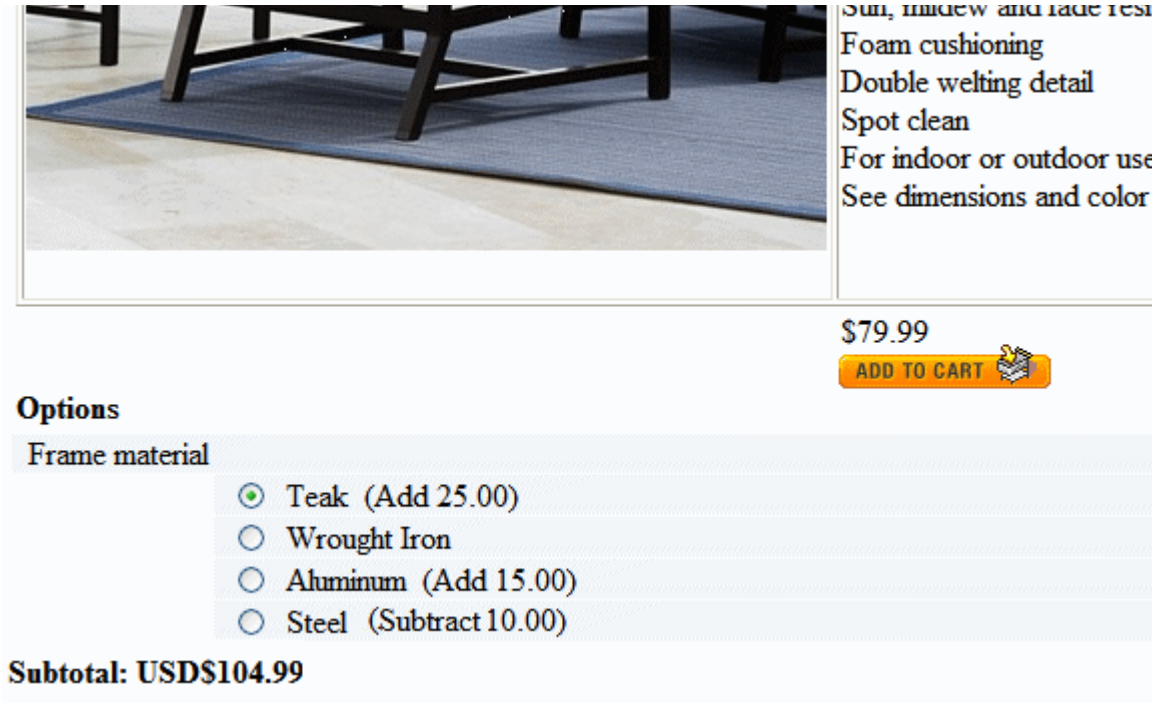
Consider another example in which the price does change. In this case, use the Item screen's **Price Modifier** field to adjust price based on the chair frame. As shown below, if the chair frame is teak, the sale price increases by $25.00.



Other chair materials might adjust the price as shown below.

Frame material	Price Modifier
Wrought Iron	$0.00
Aluminum	+$15.00
Steel	-$10.00

Note how the **Price Modifier** can either increase or decrease the sale price. Here are these options on the product page.



The chair's base price is $79.99, and the teak frame increases it to $104.99.

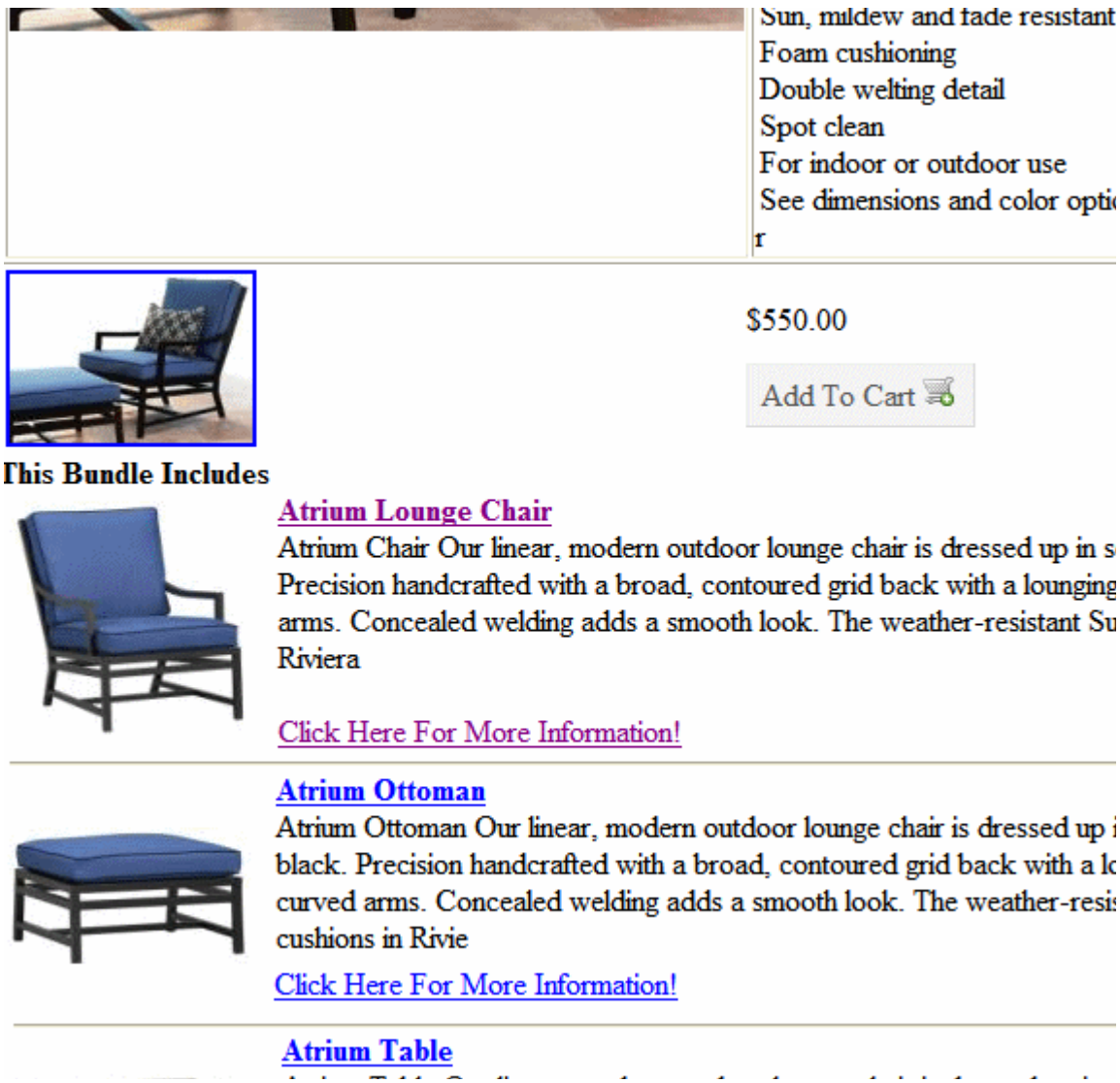
Creating a Bundle

A bundle consists of several simple products. You would use it to combine several existing products into one "umbrella" catalog entry. That entry captures pricing, SKU number, shipping, and inventory information for the bundle. The information for the individual entries that make up the bundle are not affected when one is ordered.

As an example of a bundle using furniture, assume your eCommerce site sells a chair, a table, and an ottoman separately. You also sell them together as a set.

Use a bundle to define the set, add pictures, pricing, etc. On the bundle's **Items** tab, you select the individual catalog entries that make up the bundle, as shown below.

Here is how this bundle looks on a product page.



Creating a Complex Product

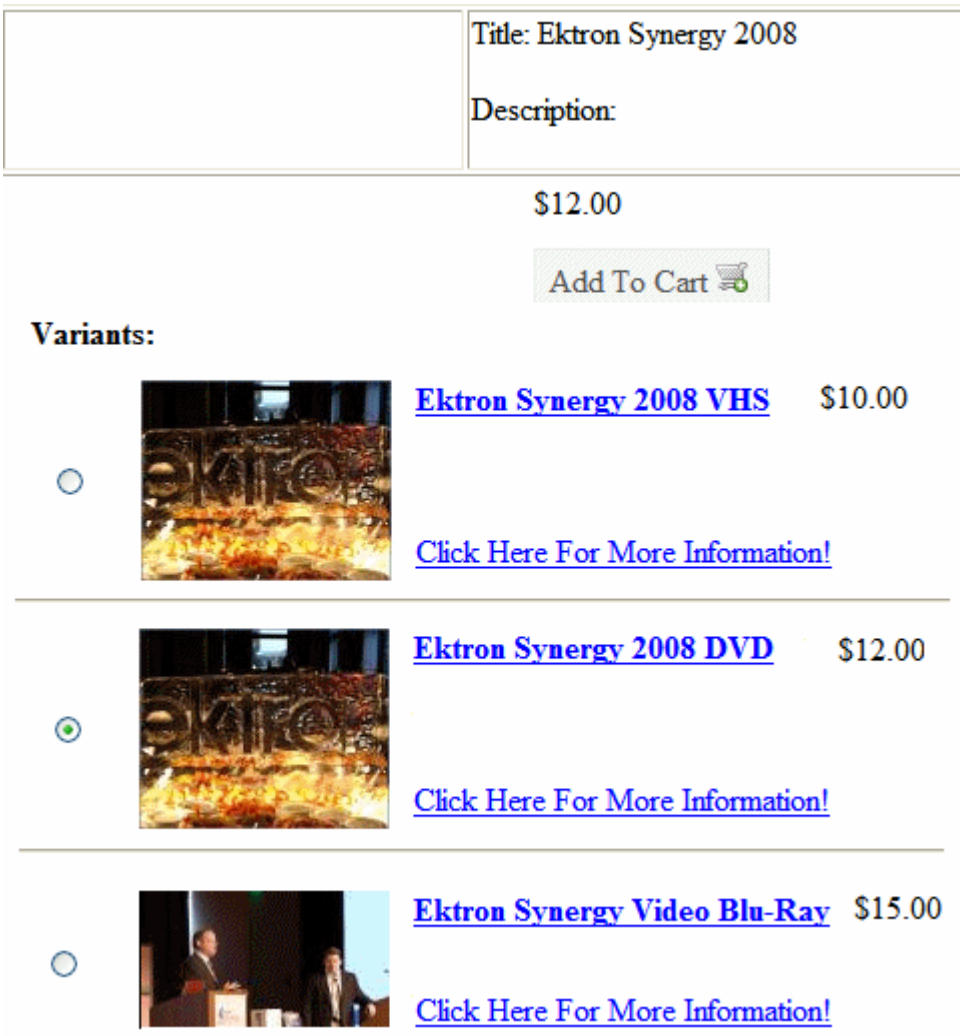
A Complex Product is similar to a bundle in that one catalog entry serves as an “umbrella” for other entries. However, unlike a bundle, a site visitor must select one of the catalog entries. So, the price is that of the selected entry, not the umbrella item.

The advantage of a Complex Product is its ability to consolidate several related items under one title, yet allow site visitors to

choose the item they want. Because each item under the umbrella is its own catalog entry, it is priced and tracked separately.

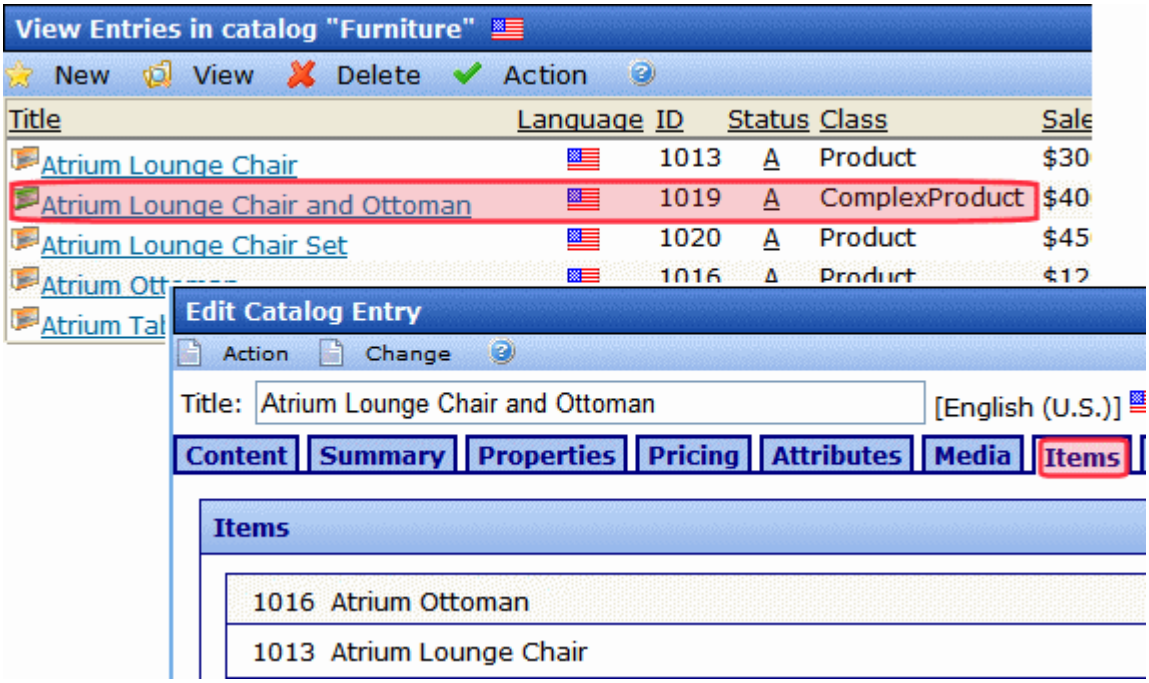
For example, a site sells movies in three formats: VHS, DVD, and Blu-ray. Each is priced differently. To accommodate this, create catalog entries for the movie in each format, assigning images, SKU number, pricing, dimensions, etc. Then, create a Complex Product, make its title the title of the movie, and use the **Items** tab to select the catalog entries of the individual formats.

The Product List or Product Search control displays the Complex Product, which is the movie title. When a site visitor selects that, he sees the product page, which lists the format and price of each assigned catalog entry. He can only choose one. See example below.



Steps in Creating a Complex Product

Unlike the Kit or Bundle, a complex product does not have its own product class. Instead, you create a catalog entry whose product class is **product**, then assign other catalog entries to it via the **Items** tab. As soon as you assign one catalog entry via the **Items** tab, the original catalog entry is converted to a Complex Product.



Note that the price of the “umbrella” product appears on the Product List and Product Search server controls. This can be misleading, since the price of individual items within the complex product can vary.

NOTE You cannot apply tier pricing to a complex product. *See Also:* "Tier Pricing" on page 1209

Creating a Subscription

A subscription is a good or service which

- can be billed on a one-time or a recurring basis
- places users who purchase it into a designated membership group, letting you grant them access to private content

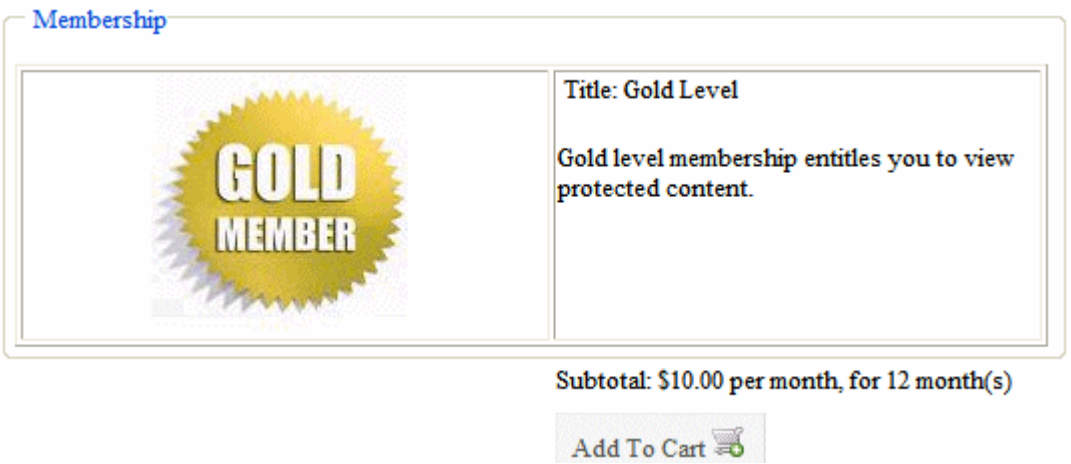
Examples include

- content only available to members who purchase a subscription
- a gym membership

- a book club, in which a customer makes the same payment and receives a different book each month
- anti-virus software that expires after 12 months
- a 3-year maintenance contract on a digital television, payable yearly

If you use the recurring billing feature, the bill can be generated for any number of months or years, but no other time increments. Each payment must be the same for the subscription's term. The term begins when a customer submits the order.

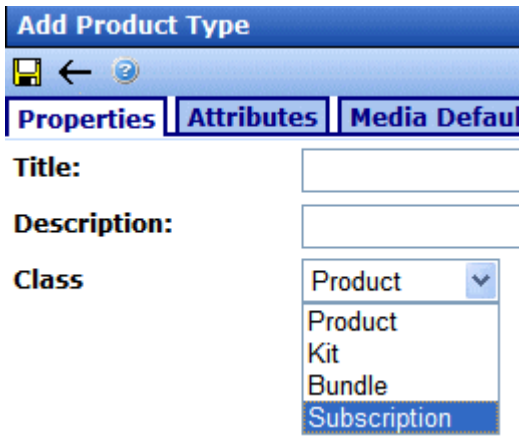
Below is an example of a subscription-based product.



NOTE Site visitors cannot apply a cart-level coupon to a subscription-based catalog entry. *See Also:* "Creating a Coupon" on page 1244

Creating a Subscription Based Catalog Entry

Creating a subscription is the similar to creating a regular catalog entry. The table below lists everything you need to do, highlighting tasks that are unique to subscriptions.

Step	For more information, see
1. Create a subscription-based Product Type. On the Product Type screen's **Product Class** dropdown, select **Subscription** (illustrated below). 	"Product Types" on page 1164
2. Assign the Product Type to a catalog folder.	• "How Product Types Affect the Creation of Catalog Entries" on page 1165 • "Creating a Catalog Folder" on page 1190
3. In that folder, create a catalog entry for each subscription.	"Creating a Catalog Entry" on page 1193
4. On the **Pricing** tab, enter the cost. If using recurring billing, enter the term of the subscription. If this product does not use recurring billing, click **No** at the **Use Recurring Billing** dropdown.	• To learn about the **Unit Pricing** fields, see "Entering a Catalog Entry's Price Information" on page 1206 Note: Subscription-based products do not support tier pricing. *See Also:* "Tier Pricing" on page 1209 • To learn about **Recurring Billing** fields, see "Entering Recurring Billing Information" on page 1184
5. On the **Items** tab, assign membership and CMS user groups.	"Assigning Membership and User Group to a Subscription-Based Catalog Entry" on page 1186

Step	For more information, see
6. If a subscription provides access to **Ektron CMS400.NET** content, use its folder Permission Table to grant permission to the membership and CMS user groups you defined in Step 5.	"Subscriptions that Involve Ektron CMS400.NET Content" on page 1187

Entering Recurring Billing Information

IMPORTANT! Due to differences in the way payment gateways work, Ektron recommends testing recurring payments with your gateway before processing live transactions.

The **Pricing** tab's **Recurring Billing** area of a subscription-based catalog entry (highlighted below) lets you determine if a subscription is billed on a one-time or a recurring basis. If recurring, it helps you define the terms.

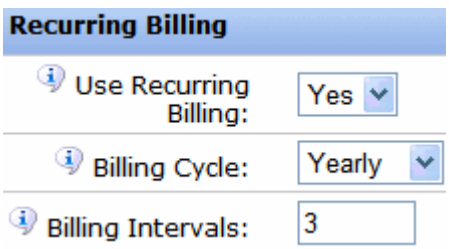
To set up recurring billing (that is, a series of scheduled payments), click **Yes** at the **Use Recurring Billing** dropdown. The recurring billing term begins when a customer submits an order, and is

based on a number of months or years. You use the **Billing Cycle** dropdown to choose a time interval.

Next, enter a number of **Billing Intervals** for which a customer is charged. For example, if a customer should be charged once a month for 12 months, complete the screen as shown above. If a customer purchases the item on June 1, 2008, his credit card will be billed on these dates.

- June 1, 2008 (purchase date)
- July 1, 2008
- August 1, 2008
- September 1, 2008
- October 1, 2008
- November 1, 2008
- December 1, 2008
- January 1, 2009
- February 1, 2009
- March 1, 2009
- April 1, 2009
- May 1, 2009

As another example, if a customer should be charged once a year for 3 years, complete the screen as shown below.



If a customer purchases the item on June 1, 2008, his credit card will be charged on the following dates.

- June 1, 2008 (purchase date)
- June 1, 2009

- June 1, 2010

Assigning Membership and User Group to a Subscription-Based Catalog Entry

You *must* assign a membership user group to a subscription-based catalog entry. Optionally, you *can* assign an **Ektron CMS400.NET** user group. You assign groups via the subscription's **Items** tab.

See Also: "Membership User Groups" on page 746; "Managing User Groups" on page 731

So, as part of setting up a subscription, you must either create new membership and (possibly user) groups, or use existing groups.

All users (identified by their email address) who purchase the product are automatically added to one of the groups.

- **Ektron CMS400.NET** users are added to the group defined in the **CMS Author Group** field
- Non-**Ektron CMS400.NET** users are added to the membership group defined at the **Member Group** field

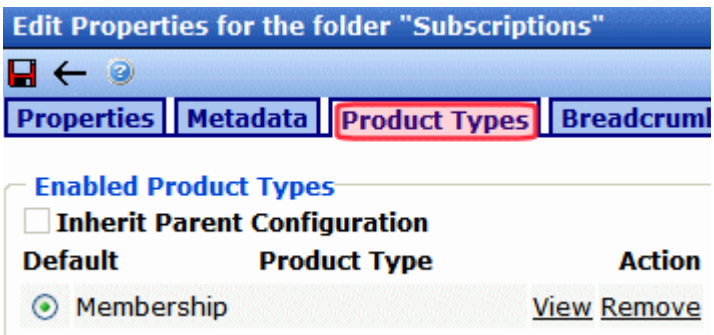
NOTE **Ektron CMS400.NET** checks a user's email address to determine if he is a CMS or a membership user.

Subscriptions that do not Involve Ektron CMS400.NET Content

If a subscription does not involve access to **Ektron CMS400.NET** content, the membership group provides a list of customers who purchased the subscription. You can use the list to manage the accounts, notify them when the subscription is about to expire, etc.

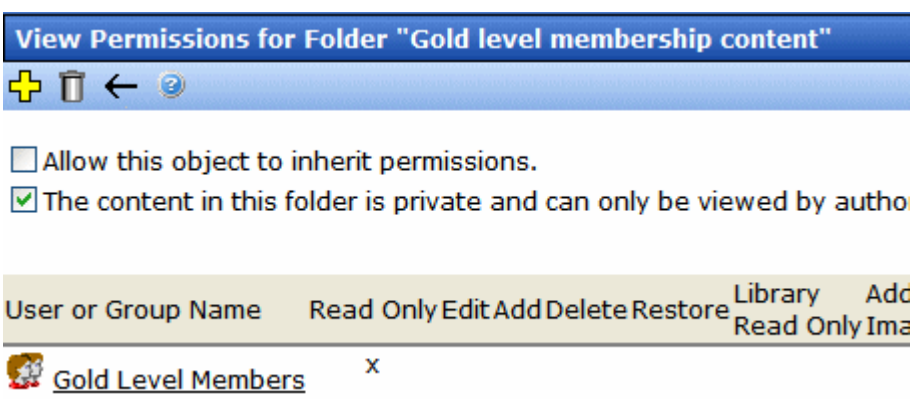
Subscriptions that Involve Ektron CMS400.NET Content

If a subscription involves access to **Ektron CMS400.NET** content, create a folder and enable one or more subscription-based product types on its Product Type screen (illustrated below).



Place the subscription products in that folder. Site visitors shop for and purchase this content on your Web site as they do all products, via eCommerce server controls.

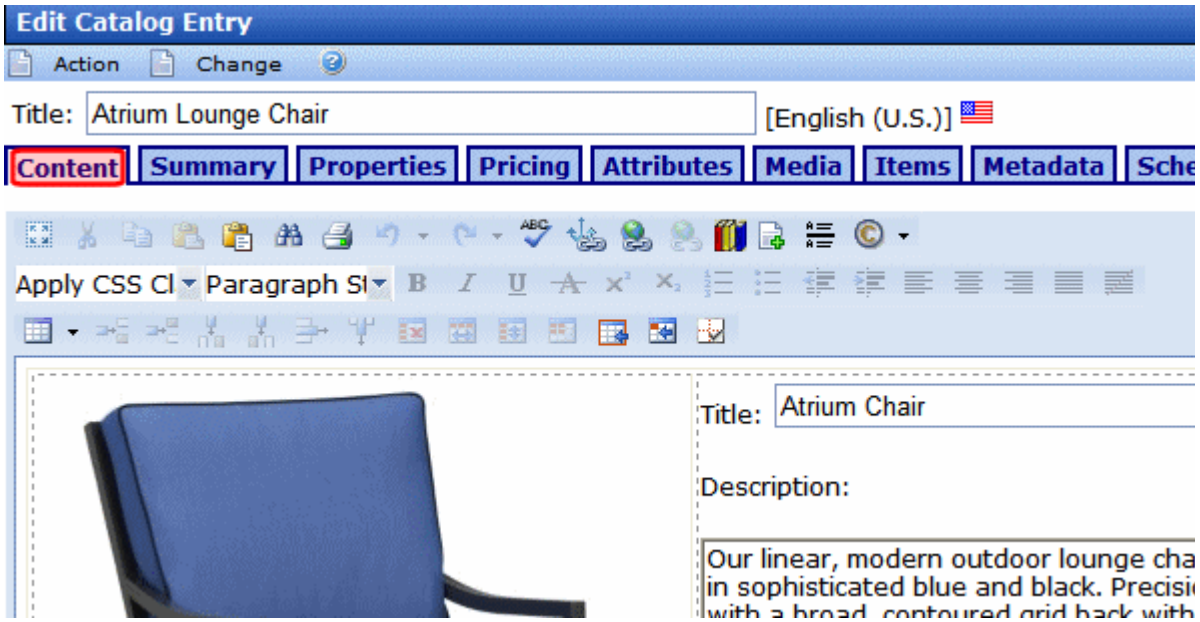
Then, create a regular content folder in which to create the confidential content. Next, use the content folder's permission table to grant the subscription user groups access to that folder (illustrated below).



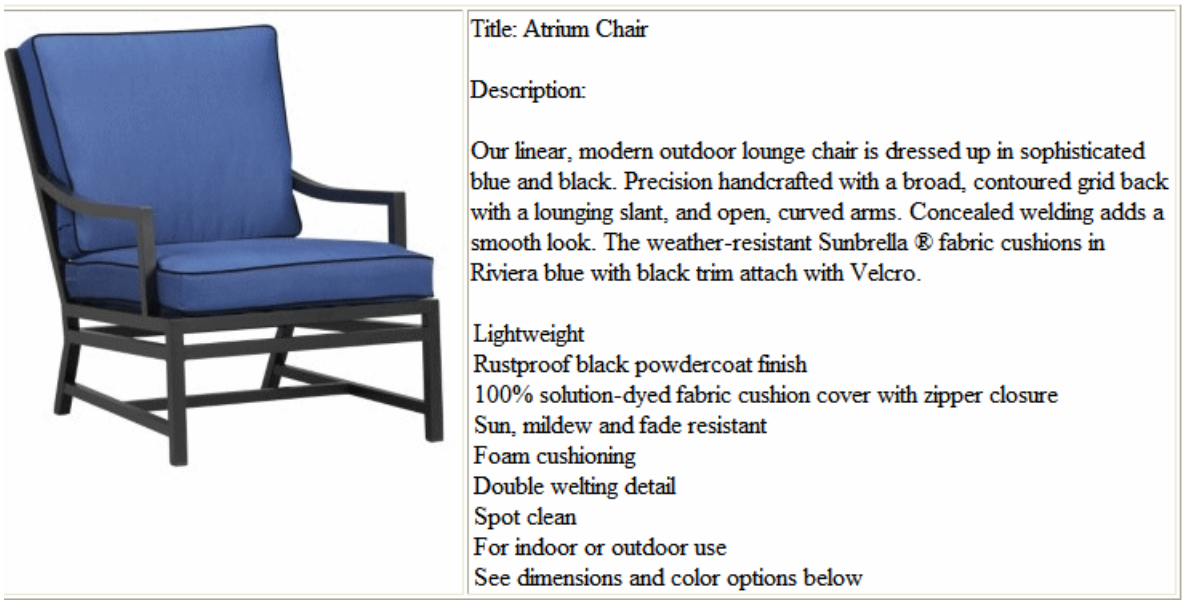
See Also: "Setting Permissions" on page 776 and "Assigning Permissions for Memberships" on page 750

Creating a Product Type Step 2: Creating the Content Page

After you complete and save the Add Product Type screen, a new screen allows you to enter XML Smart Form information. On this screen, you set up fields to collect information for the *content page* of catalog entries based on this product type. See example below.



The content page appears on the Product server control, describing this catalog entry to site visitors. See example below.



Title: Atrium Chair

Description:

Our linear, modern outdoor lounge chair is dressed up in sophisticated blue and black. Precision handcrafted with a broad, contoured grid back with a lounging slant, and open, curved arms. Concealed welding adds a smooth look. The weather-resistant Sunbrella ® fabric cushions in Riviera blue with black trim attach with Velcro.

Lightweight
Rustproof black powdercoat finish
100% solution-dyed fabric cushion cover with zipper closure
Sun, mildew and fade resistant
Foam cushioning
Double welting detail
Spot clean
For indoor or outdoor use
See dimensions and color options below

The process of creating a product type content page is the same as creating an XML Smart Form, described in "Before You Manage Smart Forms" on page 183.

Editing a Product Type

1. In the **Ektron CMS400.NET** Workarea, **go to Modules > Commerce > Catalog > Product Types**.
2. Click the product type that you want to edit.
3. See "A product type determines the following aspects of the catalog entries based on it." on page 1166.

NOTE You cannot edit a Product Type's Class.

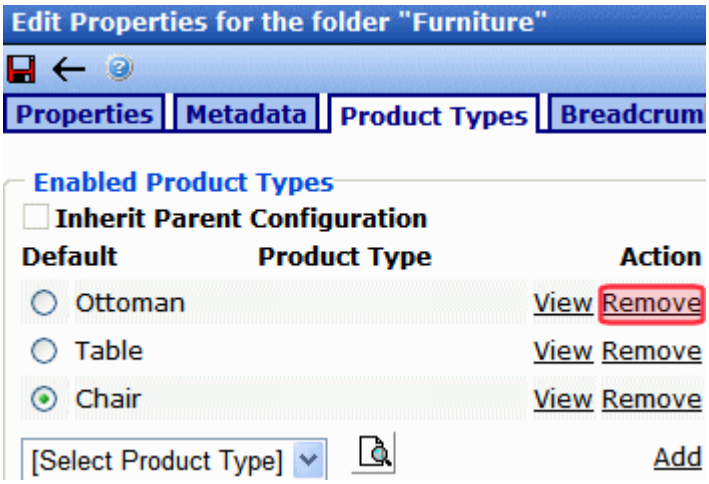
Deleting a Product Type

Prerequisite: The product type is not assigned to any catalog entries

1. In the **Ektron CMS400.NET** Workarea, go to **Modules > Commerce > Catalog > Product Types**.
2. Click a product type you want to delete.

3. Click the Delete button ( ).
4. A confirmation message appears.
5. Click **OK**.

TIP! Although you cannot delete a product type that is being used, you can prevent users from creating new catalog entries based on it. To do this, go to each applicable folder's Catalog Properties > Product Types screen and remove that product type.

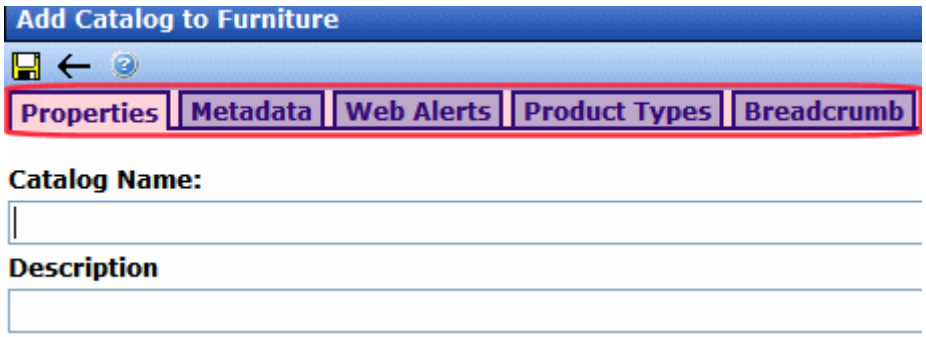


Creating a Catalog Folder

Prerequisite: One or more product types (*See Also:* "Product Types" on page 1164)

A catalog folder is a special kind of **Ektron CMS400.NET** folder designed to hold eCommerce entries. Its unique icon ( ) distinguishes it from other folder types. If you are familiar with content folders, much of that information applies to catalog folders. *See Also:* "Managing Content Folders" on page 34

Catalog folders have several tabs/screens, as shown below.



These screens are the same as regular content folders.

- **Properties** - see "Fields on the Folder Properties Screen" on page 43
- **Web Alerts** - see "Web Alert Feature" on page 1021
- **Metadata** - see "Assigning Metadata to a Folder" on page 141
- **Breadcrumb** - see "Breadcrumbs" on page 59

The unique screen is **Product Types**. *See Also:* "Assigning a Catalog Folder's Product Type" on page 1191

Like content folders, the following catalog folder information can be inherited from its parent or uniquely set for each catalog. You can only make changes after creating the catalog.

- Permissions - see "Setting Permissions for a Content Folder" on page 780
- Approvals - "Creating an Approval Chain for a Content Folder" on page 788
- Purge History - "Purge History" on page 56
- Restore Web Alert Inheritance - "Inheriting Content-Level Web Alert Information from Its Folder" on page 1053

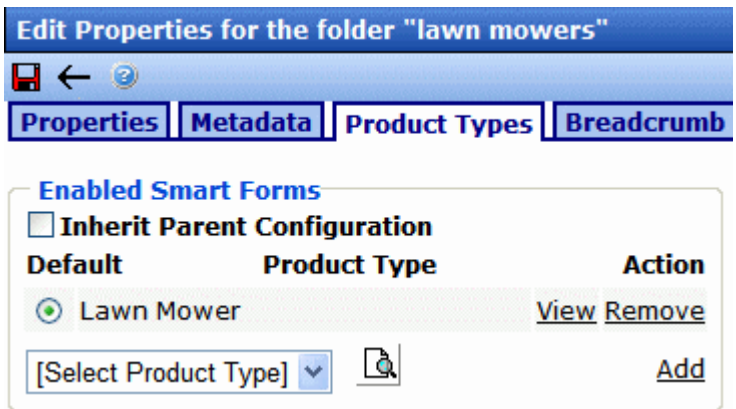
See Also: "Deleting a Catalog Folder" on page 1192

Assigning a Catalog Folder's Product Type

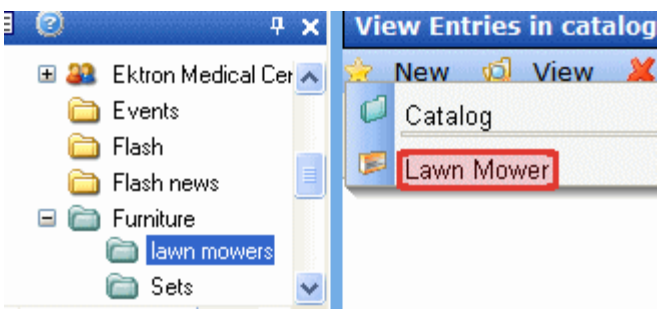
A catalog folder's **Product Types** screen lets you identify product types upon which catalog entries can be based. *See Also:* "Product

Types" on page 1164 and "How Product Types Affect the Creation of Catalog Entries" on page 1165

For example, you created a lawn mower Product Type, and want only lawn mowers to be entered in a catalog folder. In this case, open a catalog folder's **Product Types** tab, break inheritance if necessary, and select Lawn Mower as the catalog's only product type.



Then, when a **Ektron CMS400.NET** user creates an entry in this catalog, he must use the Lawn Mower product type.



Deleting a Catalog Folder

Prerequisite: No catalog entries in the folder have been placed on an order

To delete a catalog folder, follow these steps.

1. Navigate to the folder that you want to delete.
2. Click **Delete > This Catalog**.
3. A confirmation message appears.
4. Click **OK**.

Creating a Catalog Entry

Prerequisite: One or more catalog folders (*See Also:* "Creating a Catalog Folder" on page 1190)

A *Catalog entry* is the eCommerce term that describes a product sold on your Web site. It is similar to content in the rest of **Ektron CMS400.NET**, so those concepts apply to catalog entries. You should be familiar with "Managing HTML Content" on page 69 before reading this section.

Catalog entries are built from **Ektron CMS400.NET** XML Smart Forms, so use the same content and folder structure as other Smart Forms. Catalog entries also share the following features with regular content.

- content status
- approvals and permissions
- metadata
- schedule
- history and the ability to restore previous versions
- search
- taxonomies to categorize products

Catalog entries also have unique information, such as

- Tax Class - determines which taxes apply to item
- Physical dimensions - used to calculate shipping costs
- Inventory tracking
- Pricing - can be fixed or variable for any currency
  - *tier pricing*, that is, price adjusts when quantity reaches new plateau. For example, 1-9 items cost $500 each. But if 10 are sold, the price drops to $450 each.

- Images (full sized and thumbnail) to display the product on your Web Site

Because there is so much information to provide about managing catalog entries, this section takes two approaches

- "Catalog Entry Screens and Menu Options" on page 1194 describes all accessible options (tables, menus, etc.) from the catalog entry screen
- "Catalog Entry Tasks" on page 1194 describes how to do things with catalog entries: create them, delete them, etc.

Catalog Entry Screens and Menu Options

- "Tabs on the Catalog Entry Screen" on page 1198
- "Menu Options on the Catalog Entry Screen" on page 1201
- "Folder View Menu options" on page 1220
- "Content View Menu Options" on page 1221

Catalog Entry Tasks

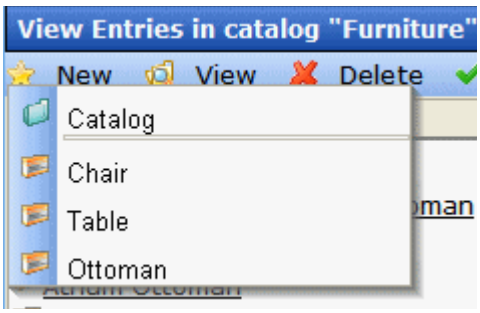
- "Creating/Updating Content" on page 1195
- "Deleting a Catalog Entry" on page 1196
- "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 1226
- View and restore a previous version of a catalog entry - Navigate to catalog folder > select catalog entry > **View Menu** > **Content History option**. *See Also:* "Content History" on page 1222
- Edit permissions for a catalog entry - To enable this, break permission inheritance. Then, assign permissions to selected users. *See Also:* "Setting Permissions for Content" on page 784
- Edit inherited approval chain - First break permission inheritance, and assign permission to users who need to be in the approval chain. Then, update the catalog entry's approval chain. *See Also:* "Editing an Approval Chain For Content" on page 792
- Make a catalog entry private, so that the Web site search does not find it - See "Private Content" on page 752

- Archive a catalog entry - See "Archived" on page 1204

Creating/Updating Content

Follow these steps to create a new catalog entry or update an existing one.

1. Navigate to a catalog folder in which you want to create or update a catalog entry. *See Also:* "Creating a Catalog Folder" on page 1190
2. Click **New** then select a product type on which to base the entry. *See Also:* "Product Types" on page 1164



3. Complete the screens as needed. The required fields are:

   - content **Title**

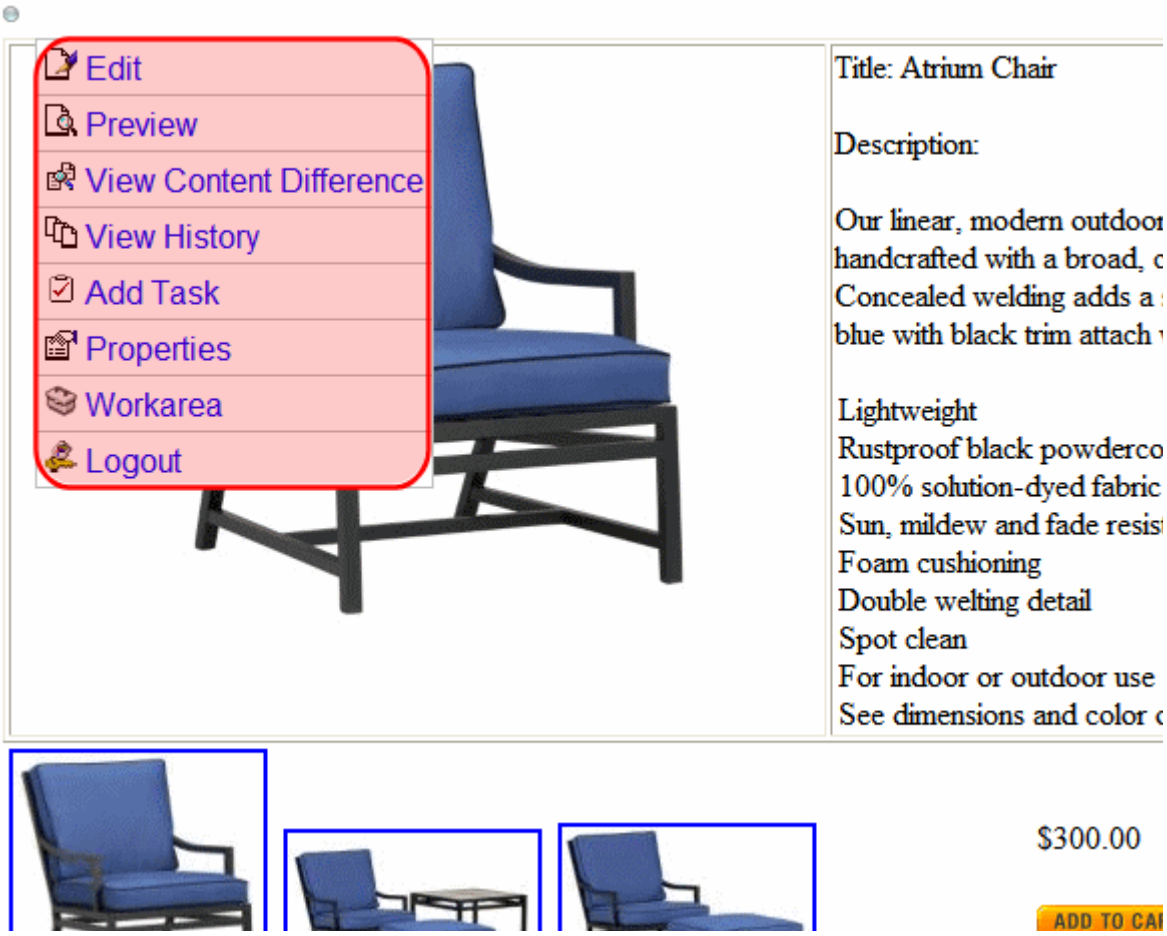
   - **Properties** tab > **SKU Number**

   - any fields on the content screen that your **Ektron CMS400.NET** administrator has designated as required

   For information on the catalog entry screens, see "Tabs on the Catalog Entry Screen" on page 1198

4. Check in or submit/publish the content. See "Action Menu" on page 1224.

NOTE After signing in to your Web site, you can also update a catalog entry's information from there.



See Also: "Using the Web Site Interface" on page 20

Deleting a Catalog Entry

Prerequisites:

- Catalog entry is not on an order, or checked out.
- You have delete permission for this catalog folder. *See Also:* "Setting Permissions" on page 776

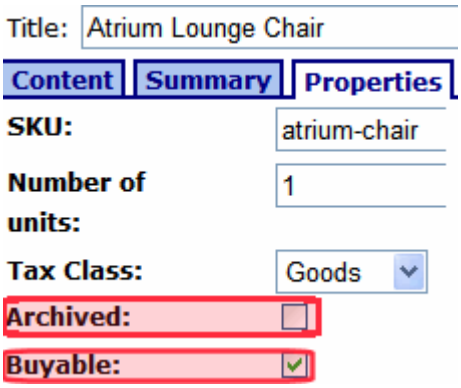
EKTRONBESTPRACTICE

Do not delete catalog entries. For example, if you delete an entry from your staging site, then run an eSync, that entry is removed from all active carts on your live site.

Instead of deleting entries, Ektron recommends archiving them using the **Properties** tab's **Archived** checkbox (shown below).

TIP! If you want to prevent site visitors from purchasing an item, but you cannot delete it because it has been placed on existing orders, you have two options.

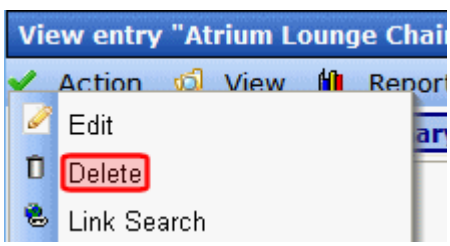
* Uncheck its **Buyable** checkbox, located on the Properties screen (circled below). If you do, the product still appears on your Web site, but the **Add to Cart** button does not appear next to it.



* Archive it, using the **Archived** check box on the Properties screen (circled above). In this case, the product does not appear on your Web site. *See Also:* "Archived" on page 1204

Follow these steps to delete a catalog entry.

1. Navigate to the catalog folder that contains the entry.
2. Click the entry.
3. Click **Action > Delete**.

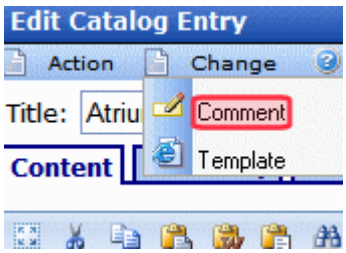
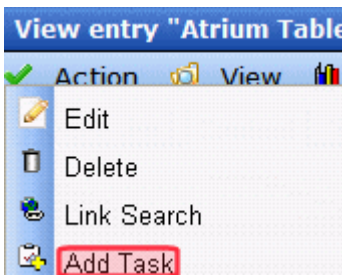


4. A warning message appears. Click **OK**.
5. The catalog entry is deleted.

Tabs on the Catalog Entry Screen

Tab	Description	For more information, see
Content	The entry's content page.	"Entering a Catalog Entry's Content" on page 1201
Summary	The content summary, by default the first 40 characters of the content text.	"Auto Generating Summaries" on page 80 and "Adding a Content Summary" in the **Ektron CMS400.NET** User Manual
Properties	eCommerce information about the catalog entry: • SKU number • Number of Units • Tax Class • Archived • Buyable • Dimensions • Inventory	"Entering a Catalog Entry's Properties" on page 1202
Pricing	• Lets you define list and sales price • For each enabled currency, you can set a fixed price or have it float with exchange rate • Allows tier pricing • For subscription products, you enter recurring billing interval and term	"Entering a Catalog Entry's Price Information" on page 1206
Attributes	Additional information to help describe a catalog entry	"Entering a Catalog Entry's Attributes" on page 1213
Media	Lets you add images that appear on several eCommerce server controls	"Entering a Catalog Entry's Media" on page 1215

Tab	Description	For more information, see
Items	Catalog entries that you are adding to this "umbrella" item. • If you add catalog entries to a simple product, it becomes a complex product. • For bundles, add catalog entries that make up a bundle. • For kits, enter groups and their options. • For subscription products, define membership and **Ektron CMS400.NET** user groups to which users are assigned when they purchase the subscription.	"Entering a Catalog Entry's Items" on page 1219 "Creating a Complex Product" on page 1178 "Creating a Bundle" on page 1176 "Creating a Kit" on page 1173 "Creating a Subscription" on page 1181
Metadata	Enter meta tags, title tags, etc. Note: When viewing the metadata screen in view mode only, you see the catalog entry's **Product Icon**. The product icon is set on the **media** tab. *See Also:* "Product List, Product Search, and Recommendation server controls" on page 1096	"Metadata" on page 118
Alias	Note: This tab only appears if Aliasing is enabled. • View and edit the catalog entry's primary manual alias • View all automatic aliases assigned to this catalog entry	"Adding a Manual Alias via the Alias Tab" on page 604 "URL Aliasing" on page 567
Schedule	Lets you control when a version of a catalog entry becomes visible on the Web site. Similarly, you can remove a catalog entry on a predetermined date and time. Note: The **Archive and remain on the site** option is not available with catalog entries.	**Ektron CMS400.NET** User Manual > "Working with Folders and Content" > "Scheduling Content to Begin and End"

Tab	Description	For more information, see
Comment	View comments on changes made when editing a catalog entry. Note: To view and edit catalog entry comments, open the editor and choose **Change > Comment**.  The comment also appears on the View Content and Content History screens. Use it to help distinguish one version from another.	
Tasks	View tasks assigned to this catalog entry. Note: To add a task from the View Entry screen, click **Action > Add Task**. 	; **Ektron CMS400.NET** User Manual > “Managing Tasks”
Category	Add a taxonomy category to the catalog entry. A list of available taxonomies and whether one is required are defined on the Catalog properties screen. Note: This tab only appears if at least one taxonomy is assigned to the catalog folder.	”Taxonomy” on page 642; ”Assigning a Taxonomy or Category to Content via the Edit Content Screen” on page 662 ”Fields on the Folder Properties Screen” on page 43

Menu Options on the Catalog Entry Screen

Menu Option	Description
Action Menu	
Save	Saves the catalog entry without leaving the editor. It is a good idea to save your work frequently.
Checkin	Save and check-in the document. This action returns the changed content to the database and exits the editor. It does not submit the content into the approval chain. Rather, it allows you and other users to continue changing it.
Submit/Publish	**Submit** the content into the approval chain. This action also returns the new or updated content to the database and exits the editor. **Publish** the content to the Web site. Note: Only the last approver in the approval chain sees this button. If no approval chain is assigned to the content's folder, every authorized user sees this button. *See Also:* "Setting Approval Chains" on page 786 This action also returns the changed content to the database and exits the editor.
Undo checkout	Exit screen and do not save changes made since you began editing this catalog entry.
Change Menu	
Comment	Enter comments on changes made when editing a catalog entry. The comment also appears on the View Content and Content History screens. Use it to help distinguish one version from another.
Template	A folder's default template is automatically applied to all content in the folder. However, you can change a content item's template to any of those assigned to the folder. *See Also:* "Assigning Templates to Content" on page 77

Entering a Catalog Entry's Content

The **Content** tab displays the content page of this catalog entry's product type. *See Also:* "Creating a Product Type Step 2: Creating the Content Page" on page 1188

Because the format is customized for your system, this documentation cannot explain how to respond to the fields.

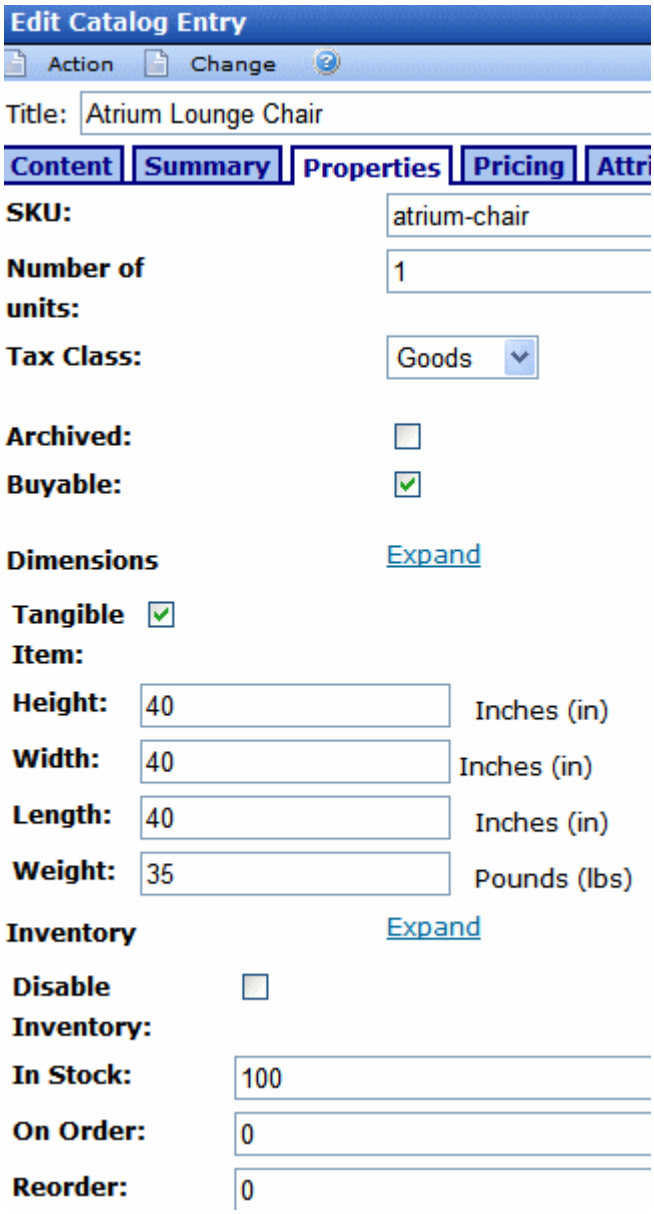
To learn about working with the editor, seethe **Ektron CMS400.NET** User Manual section “Introduction to **Ektron CMS400.NET** Editors.”

Entering a Catalog Entry’s Summary

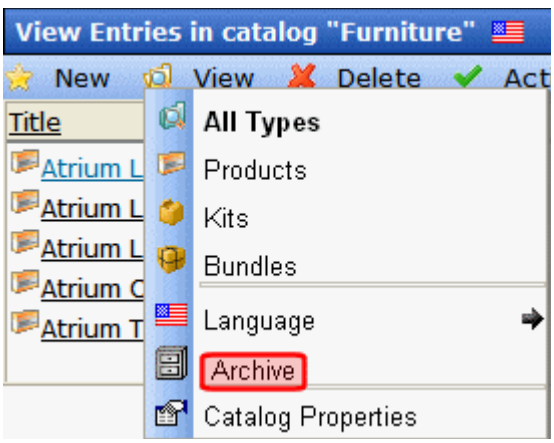
See ”Auto Generating Summaries” on page 80 and “Adding a Content Summary” in the **Ektron CMS400.NET** User Manual

Entering a Catalog Entry’s Properties

The Properties screen collects eCommerce-specific information about your catalog entries.



Use the following table to complete the Properties screen.

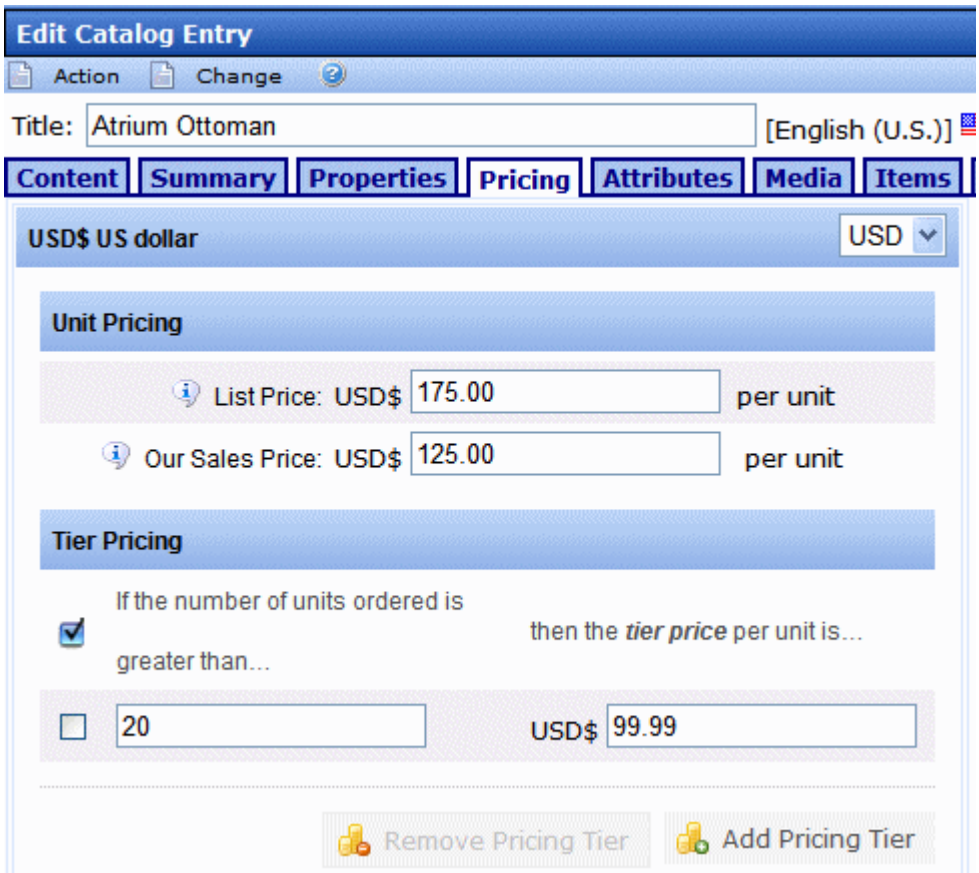
Property	Description
SKU	Enter a unique SKU code for this catalog entry. This is a required field that does not accept a value of zero (0) or a space character.
Number of Units	If this item has a quantity other than one (1) for internal record-keeping purposes only, enter that number. For example, a 12 pack of soda. Set **Quantity** is 12 to represent the number of units. But a site visitor still orders 1 of the item. The quantity is not used when this item is ordered, nor does it affect inventory levels. It is used for clerical purposes only.
Tax Class	Select the catalog entry's Tax Class. *See Also:* "The Tax Class Screens" on page 1155
Archived	Check this box if you want to *archive* this catalog entry. Once archived, site visitors can no longer see nor order it. Also, **Ektron CMS400.NET** users cannot view an archived catalog entry in its catalog folder via the View Folders screen. To view it, open its catalog folder then select **View > Archive**.  To make the entry available again on your Web site, open its archive folder, edit the entry by unchecking the **Archived** check box, and publish it. Note: A catalog entry can also be set to Archived status if it reaches its expiration date and its **Schedule** tab > **Action on End Date** field is set to **Archive and remove from site (expire)**. *See Also:* **Ektron CMS400.NET** User Manual > "Working with Folders and Content" > "Scheduling Content to Begin and End" > "Setting Archive Options."

Property	Description
Buyable	To let site visitors add this catalog entry to a shopping cart, check this box. Otherwise, uncheck it. If a product is *not* buyable, it can still be seen by site visitors, but its product page does not display an **Add to Cart** button. Tip! To remove a catalog entry from your site, use the **Archive** field.
Dimensions - Used to calculate packaging containers and shipping costs. *See Also:* "Packages" on page 1145	
Tangible Item	Check this box if the item is *tangible*, that is, it has dimensions, weight, and will be shipped to a customer. Examples of non-tangible items are services, warranties, and downloadable software. If a catalog entry is tangible, you must enter its height, width, length, and weight.
Height	Enter the catalog entry's height. The units of measure are specified in the web.config file's `ek_measurementsystem` property. Required if **Tangible Item** is checked.
Width	Enter the catalog entry's width. Required if **Tangible Item** is checked.
Length	Enter the catalog entry's length. Required if **Tangible Item** is checked.
Weight	Enter the catalog entry's weight. Required if **Tangible Item** is checked.
Inventory - eCommerce's inventory system is a provider model, allowing you to connect with third-party inventory systems.	
Disable Inventory	Check this box if you do not want to track inventory activity for this catalog entry. As examples, it is a service contract or a subscription to confidential content on your site.
In Stock	Enter the number of items on hand for this catalog entry. This number is automatically adjusted when an order containing this entry is submitted. For example, there are 100 items in stock. When an order for 10 is submitted, the **In Stock** value changes to 90. If the amount placed on an order exceeds the **In Stock** amount, the site visitor see this message "The item ... is not available for purchase. Please remove from cart before submitting order."
On Order	The number of items that have been ordered but not yet delivered appears.

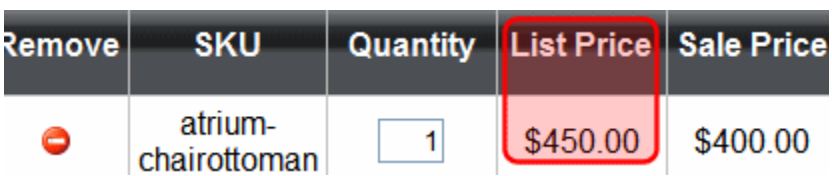
Property	Description
Reorder	Enter the **In Stock** quantity at which you need to reorder this item. When the **In Stock** quantity reaches this level, an event is triggered which can be used by an external inventory system to generate a new order.

Entering a Catalog Entry's Price Information

Use the Pricing screen to enter price information for catalog entries.



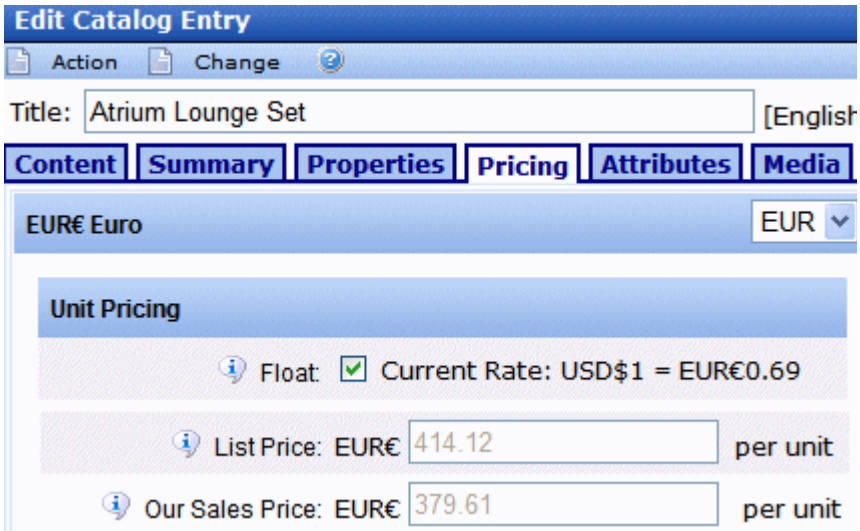
Use the following table to complete the Pricing screen.

Field	Description
Currency selector	Use this dropdown to select a currency for the prices. *See Also:* "Alternate Currency Pricing" on page 1208 Only enabled currencies appear. *See Also:* "Enabled Currencies" on page 1107
List price	Enter the catalog entry's list, or manufacturer's suggested retail, price. The list price appears on most eCommerce controls (see examples below) but is *not* used in any calculations. **Cart server control**  **Product Search server control**
Our Sales Price	Enter the catalog entry's sale price. This price is used to calculate line item totals, coupon discounts, shipping costs, etc. The sales price appears on most eCommerce controls. See examples above.

Field	Description
Add Pricing Tier button	"Tier Pricing" on page 1209
Recurring Billing (appears only for subscription-based products)	"Creating a Subscription" on page 1181

Alternate Currency Pricing

By default, the Pricing screen converts prices to every enabled currency (see screen below), using the exchange rate. Site visitors who select a non-default currency see these prices. *See Also:* "Updating the Exchange Rate" on page 1111



The **Float** checkbox (checked by default) indicates that prices change as the exchange rate changes.

If you do not want to float a catalog entry's price, but instead fix it for a currency, select the currency, uncheck **Float**, edit the price, and publish. From then on, if a site visitor selects that currency and catalog entry, the price set on this screen is used. The exchange rate is ignored.

For example, a television costs 700 Euros, regardless of its cost in US dollars or the exchange rate. To incorporate this, do *not* check the **Float** checkbox.

When you first select **EUR** on the **Pricing** screen, the default currency's prices are converted using the exchange rate. For example, the television's sale price is $1000 US dollars, and today's exchange rate is .7811. When you select **Eur** from the **Pricing** screen's currency selector, the television's cost is set at 781.10 Euros. You change the price to 700.00 Euros.

From that point on, the Euro price only changes if an authorized user accesses this screen and changes it manually.

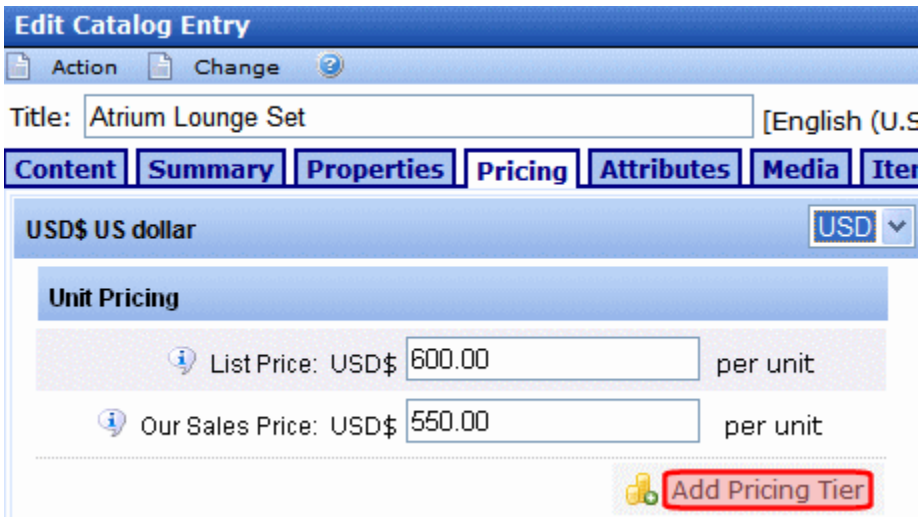
Tier Pricing

eCommerce supports *tier pricing*, that is, a pricing schedule that adjusts according to order quantity. Typically, the price is reduced as more items are ordered. For example, if a visitor orders 1-5, items are $10.00 each; 6-10, $9.00 each; 11 or more, $8.50 each.

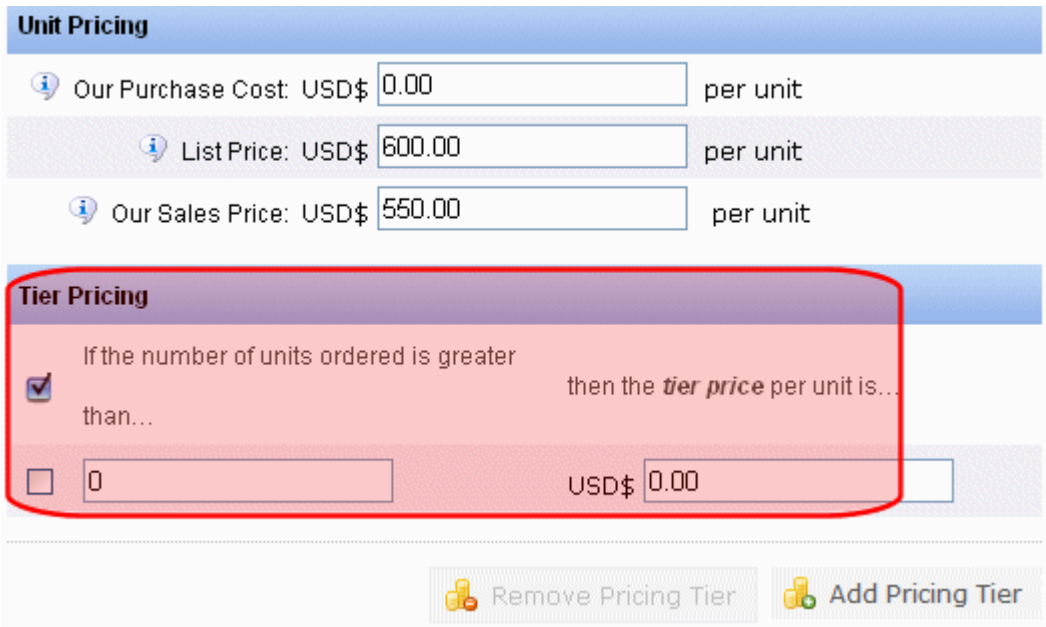
NOTE Tier pricing is not supported for subscription products, nor for complex products. *See Also:* "Creating a Subscription" on page 1181, "Creating a Complex Product" on page 1178

To set up tier pricing, follow these steps.

1. In the Workarea, open the catalog folder containing the entry to which you want to apply tier pricing.
2. Edit the catalog entry.
3. Click the **Pricing** tab
4. Click the **Add Pricing Tier button** (shown below).



5. The following screen section appears.



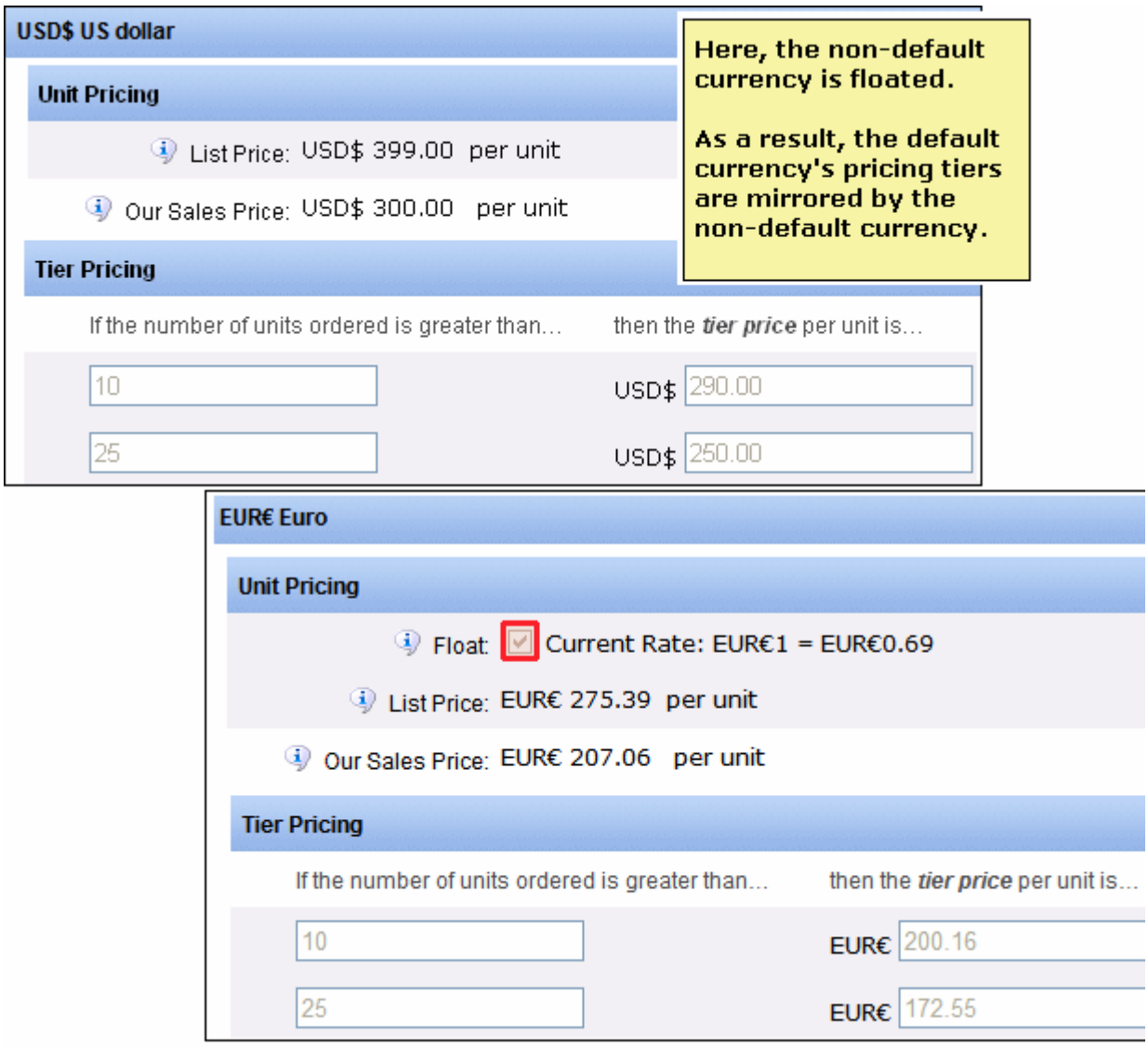
6. In the left column, enter the quantity of items above which the tier price is used.
7. In the right column, enter the price to be used when an order quantity *exceeds* the number in the left column.
8. Enter as many tiers as necessary.

NOTE To remove a tier, check the box to its left, then click the **Remove Pricing Tier** button.

Tier Pricing and Non-Default Currencies: When Floated

If a non-default currency is *floated*, then that currency's pricing tiers mirror the default currency's pricing tier values. The amounts are adjusted by the exchange rate.

These values appear on pricing screen in view-only mode and cannot be changed. This is illustrated below.


USD$ US dollar
Unit Pricing
List Price: USD$ 399.00 per unit
Our Sales Price: USD$ 300.00 per unit
Tier Pricing
If the number of units ordered is greater than...
then the tier price per unit is...
10
USD$ 290.00
25
USD$ 250.00
Here, the non-default currency is floated.
As a result, the default currency's pricing tiers are mirrored by the non-default currency.
EUR€ Euro
Unit Pricing
Float:
Current Rate: EUR€1 = EUR€0.69
List Price: EUR€ 275.39 per unit
Our Sales Price: EUR€ 207.06 per unit
Tier Pricing
If the number of units ordered is greater than...
then the tier price per unit is...
10
EUR€ 200.16
25
EUR€ 172.55

If pricing tiers are set up for the default currency and the user unchecks the **Float** box, he is notified that the pricing tiers can now be edited. Next, Tier Pricing fields are loaded with the existing values but the user can change values, remove existing tiers, and add new ones.

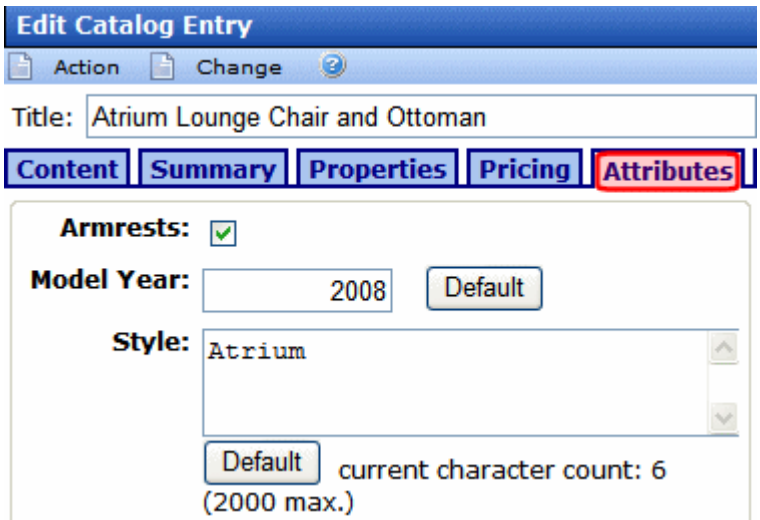
Tier Pricing and Non-Default Currencies: When *Not* Floated

If a non-default currency is *not floated*, its pricing tiers are independent of the default currency's. That is, they do not exist initially regardless of whether they exist for the default currency. If the user clicks **Add Pricing Tier**, **Tier Pricing** fields appear and let the user enter number of units and corresponding tier price per unit.

If pricing tiers are set up for a non-default currency and the user checks the **Float** box, the pricing tiers are changed to mirror those of the default currency. If the default currency has no pricing tiers, then that currency has none. You cannot independently edit a non-default currency's pricing tiers if **Float** is checked.

Entering a Catalog Entry's Attributes

Attributes are additional pieces of information that help describe a catalog entry. To illustrate the concept, the following attributes are applied to furniture in **Ektron CMS400.NET**'s sample site.



In the Workarea, you select a catalog entry then click the **Attributes** tab to enter or modify attribute values. In the above example, you could change model year to **2009**, or style to **Woodland**. You cannot however change fields, field names, or data types.

NOTE If no attributes are assigned to the product type on which a catalog entry is based, you will not see an **Attributes** tab when working with that catalog entry.

On your Web site, a catalog entry's Attribute field names and values appear by default on the Product server control, as shown below.

Origin of Attributes

Attribute fields, data types, and default values are created as part of a Product Type. *See Also:* "Attributes Tab" on page 1169

When you create a catalog entry, you base it on a product type. The product type's **Attribute** information is imported to the catalog entry.

What Happens to a Catalog Entry's Attributes When Moved

Like metadata that follows **Ektron CMS400.NET** content, if a catalog entry is moved to another folder, its attributes stay with it.

Entering a Catalog Entry's Media

Use the **Media** tab to add product images that appear on the following server controls.

- Product (the smallest thumbnail may appear)
- Product List
- Product Search
- Recommendation

See Also: "Images in eCommerce" on page 1094

Adding a New Image

Follow these steps to add a new image. *See Also:* http://www.w3schools.com/tags/tag_IMG.asp

1. Click the **Media** tab.
2. Click **Add Image** (circled below).

3. Enter an image **Title**. This is a required field.
4. Enter the image's **Alt text**. This is a required field.
5. Click the **Browse** button and navigate to the image you want to add.
6. Click the **Upload** button.
7. The image is uploaded to the `siteroot/uploadedimages` folder.

NOTE When an image is uploaded to the **Media** tab, the original image and any thumbnails associated with it are added to the Library. For example, if you add an image named "TestImage" (actual file name: "case.jpg") with a 150px and 50px thumbnails, you see the following entries in your library (*File Name - Path*):
TestImage - /~siteroot~/uploadedImages/case.jpg
case[filename]150 - /~siteroot~/uploadedImages/case[filename]150.jpg
case[filename]50 - /~siteroot~/uploadedImages/case[filename]50.jpg

8. The image appears on the screen, below any existing images.
9. Determine if you want the image's smallest thumbnail to appear on the product server control by selecting **Yes** or **No** next to **Gallery Display**. (See example below). *See Also:* "Product Server Control, thumbnails" on page 1095
10. If you want to designate the image as the *product icon*, click **Set as Product Icon**. *See Also:* "Product List, Product Search, and Recommendation server controls" on page 1096

To learn about the image thumbnails, see "Determining Thumbnail Size" on page 1217.

Editing an Existing Image

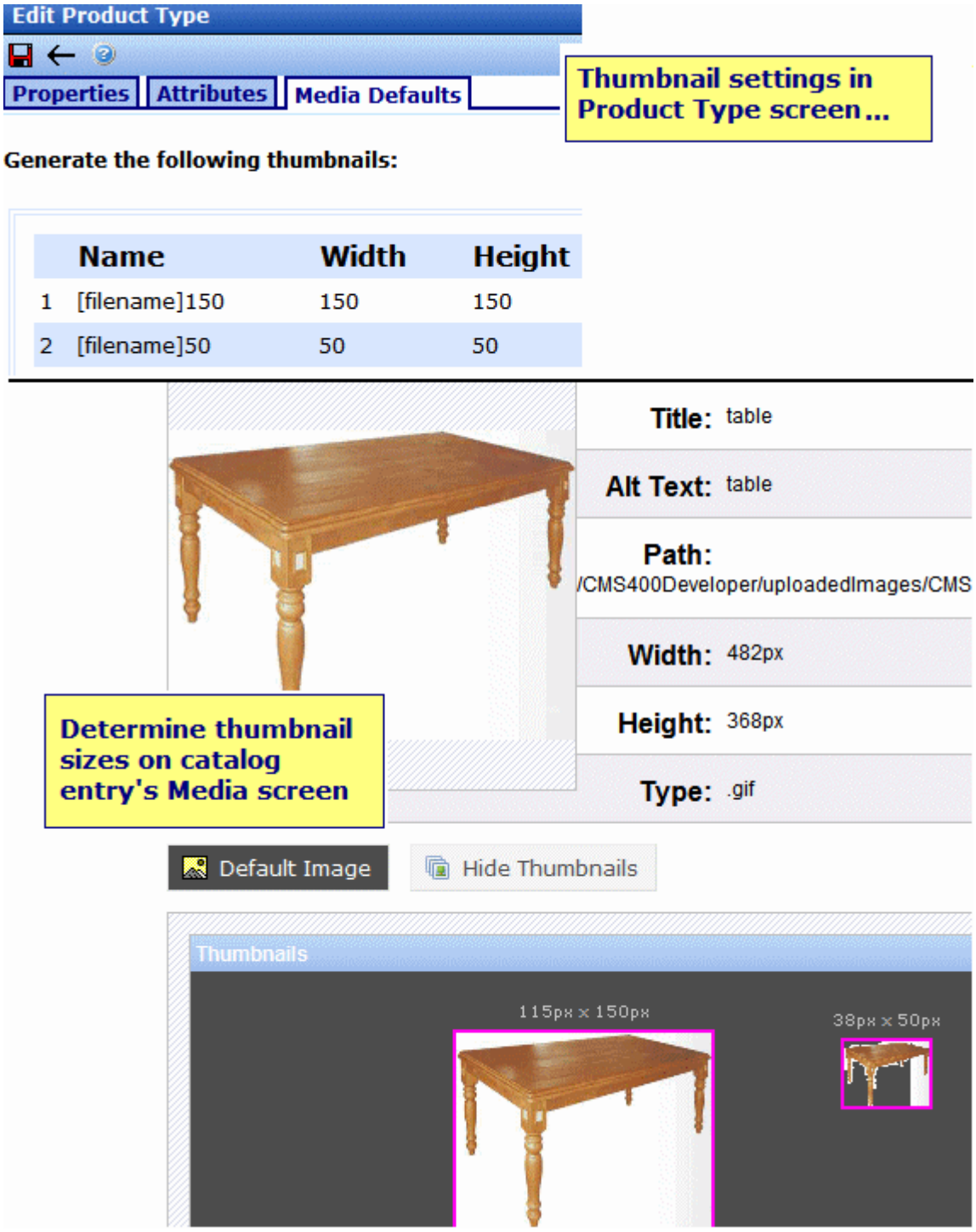
NOTE You cannot change an existing image. If you need to do this, delete the image you do not want, then add the correct one. You can only edit the **Title** and **Alt Text**.

1. Click the **Media** tab.
2. Move the cursor to the field that you want to edit.
3. Click the pencil icon to the right of the field (shown below).

4. Update the text as needed.
5. Click the OK button ( ).

Determining Thumbnail Size

When you create a catalog entry, you base it on a Product Type. The selected product type's **Media Defaults** information determines the sizes of thumbnails created for each image assigned to the **Media** tab. *See Also:* "Media Defaults Tab" on page 1172


Edit Product Type
Properties
Attributes
Media Defaults
Thumbnail settings in Product Type screen...
Generate the following thumbnails:
Name
Width
Height
1 [filename]150 150 150
2 [filename]50 50 50
Title: table
Alt Text: table
Path: /CMS400Developer/uploadedImages/CMS
Width: 482px
Height: 368px
Type: .gif
Determine thumbnail sizes on catalog entry's Media screen
Default Image
Hide Thumbnails
Thumbnails
115px x 150px
38px x 50px

- If the image is *less than* both thumbnail dimensions (height and width), it appears full size.
- If the image is *greater than* the thumbnail's dimensions, the image is reduced proportionately, scaling its dimensions to the thumbnail size.

The Default Image

If you do not assign an image to a catalog entry, but one is assigned to appear on a server control, the following default image is used.

If you want to change the default image, edit the following file:

site root/WorkArea/images/application/Commerce/productImageBackground.gif

Entering a Catalog Entry's Items

Use the **Items** tab to add additional information to the current entry. It is used in these situations.

- to select the catalog entries that make a product into a complex product. *See Also:* "Creating a Complex Product" on page 1178
- to select the catalog entries that make up a bundle. *See Also:* "Creating a Bundle" on page 1176

See Also: "Product Classes" on page 1165

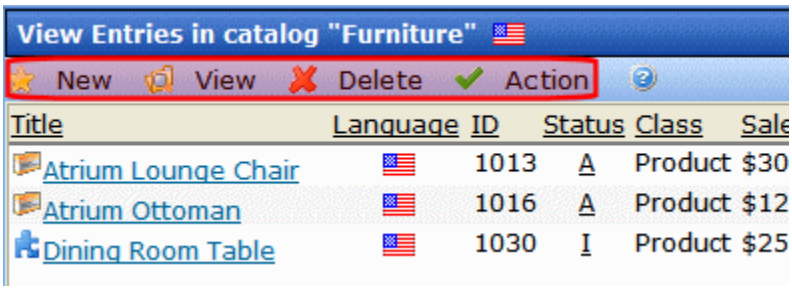
- to select the groups and their options that make up kits. *See Also:* "Creating a Kit" on page 1173

NOTE You can only choose a catalog entry whose language matches the language of the original item.

- to select a subscription-based catalog entry's user groups. *See Also:* "Assigning Membership and User Group to a Subscription-Based Catalog Entry" on page 1186

Folder View Menu options

The following menu options are available when you open a catalog folder.



Menu option	Description
New Menu	
Catalog	Create a new catalog folder underneath the current one. *See Also:* "Creating a Catalog Folder" on page 1190
product types assigned to folder	Create a new catalog entry based on one of the displayed product types. Your product types may not match the ones shown below. Product types are assigned to a catalog's via the **Product Types** screen. *See Also:* "Product Types" on page 1164
View Menu	

Menu option	Description
All types, products, kits, bundles	Lets you change the display of catalog entries. You can see all entries in folder, or only those of a selected product class. *See Also:* ”Product Classes” on page 1165
Language	Limits display of catalog entries to one language. Also determines the language of any new catalog entries you create in this folder.
Archive	Displays archived catalog entries. *See Also:* ”Archived” on page 1204
Catalog Properties	Lets you view and edit catalog folder information. *See Also:* ”Creating a Catalog Folder” on page 1190
Delete Menu - See**Ektron CMS400.NET** User Manual > “Working with Folders and Content” > “Delete Menu” Note - You cannot delete a catalog entry that has been placed on any order. The order’s status is irrelevant.	
Catalog	”Deleting Folders” on page 50
Entries	See • ”Deleting a Catalog Entry” on page 1196 • **Ektron CMS400.NET** User Manual > “Working with Folders and Content” > “Deleting Content” > “Deleting Several Content Items in a Folder”
Action Menu	
Move entry	”Moving or Copying Content” on page 84 Note: You can only move catalog entries -- you cannot copy them.
Search	See **Ektron CMS400.NET** User Manual > “Working with Folders and Content” > “Searching the Workarea“ > “The Search Published Tab”

Content View Menu Options

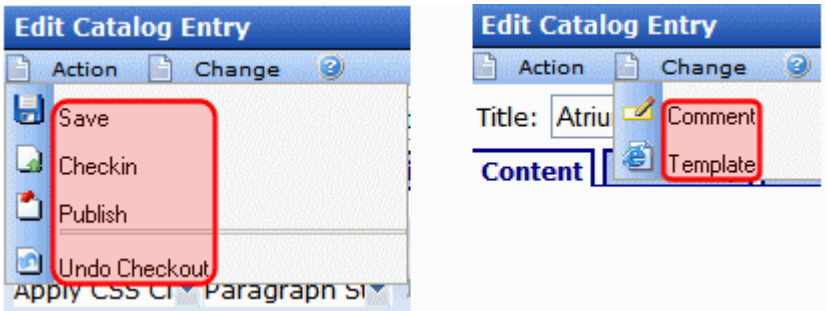
The following menu options are available when you are viewing a catalog entry.

Menu option	Description
Action Menu	
Edit	Edit the catalog entry. *See Also:* "Tabs on the Catalog Entry Screen" on page 1198
Delete	See • "Deleting a Catalog Entry" on page 1196 • **Ektron CMS400.NET** User Manual > "Working with Folders and Content" > "Deleting Content"
Link Search	Locates all content that includes a Quicklink to the displayed catalog entry. This feature is useful before deleting a catalog entry, because it informs you of every entry that will include a "dead" link if you delete that entry. You should then edit those catalog entries and remove or change the obsolete Quicklinks.
Add Task	• "Managing Tasks" on page 360 • **Ektron CMS400.NET** User Manual > "Managing Tasks"
View Menu	
Content History	Lists every version of the content available in **Ektron CMS400.NET**. After viewing the View Content History window, you can click any version to see its detail. *See Also:* **Ektron CMS400.NET** User Manual > "Working with Folders and Content"> "Viewing and Restoring Previous Content" > "The Content History Window"
View Approvals	Access the catalog folder's approval chain. *See Also:* "Setting Approval Chains" on page 786

Menu option	Description
View Permissions	Access the catalog folder's permissions table. *See Also:* "Setting Permissions" on page 776
Cross Sell	Lets you assign cross sell items to this catalog entry. *See Also:* "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 1226
Up Sell	Lets you assign up sell items to this catalog entry. *See Also:* "Adding Cross Sell and Upsell Recommendations to a Catalog Entry" on page 1226
View Properties	Lets you • view the - catalog entry's **product type** *See Also:* "Product Types" on page 1164 - Flagging Definitions assigned to the catalog entry's folder *See Also:* "Flagging" on page 972 • view and edit the **Content Searchable** setting - The search only considers content if this field is checked. By default, this field is checked when an entry is created.
Reports Menu	
Content Statistics	"Viewing the Content Rating Report" on page 92
Analytics	Provides a visual display of order information for a selected catalog entry. *See Also:* "eCommerce Analytics" on page 1225

Editor View Menu Options

The following options are available when you are editing a catalog entry's content.

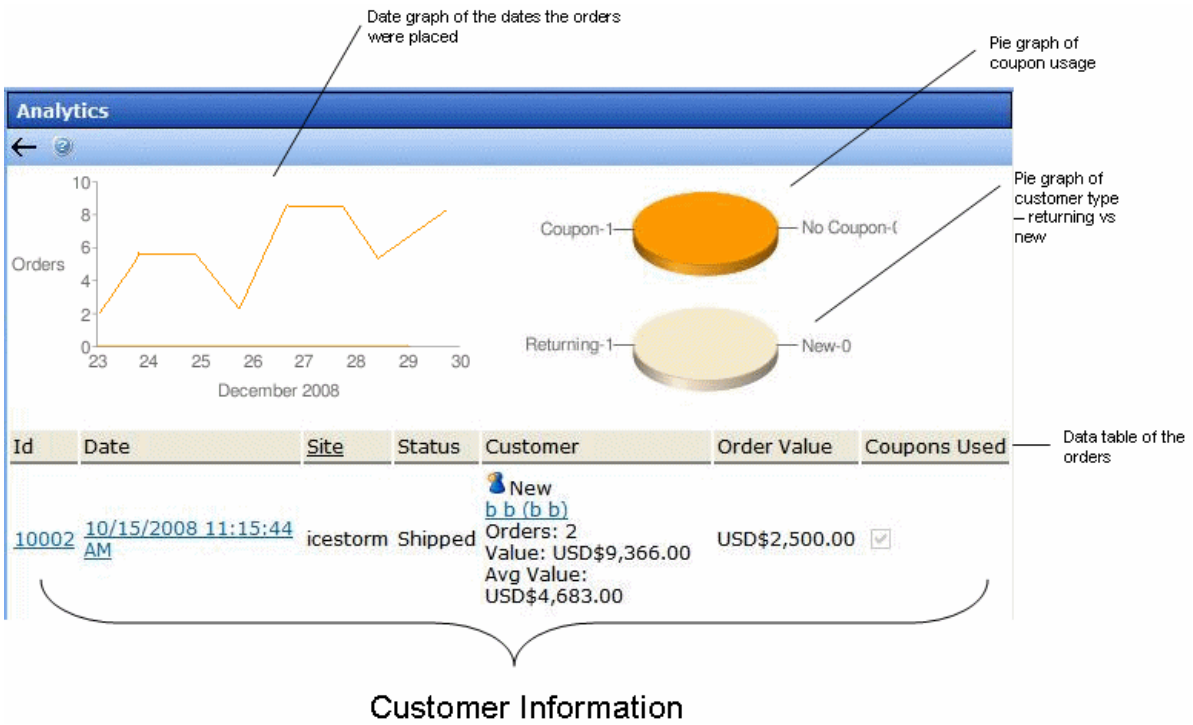


Menu Option	Description
Action Menu	
Save	Save the content without leaving the editor. It is a good idea to save your work frequently.
Check in	Save and check-in the document. This action returns the changed content to the database and exits the editor. It does not submit the content into the approval chain. Rather, it allows you and other users to continue changing it.
Submit or Publish	**Submit** the content into the approval chain. This action also returns the new or updated content to the database and exits the editor. **Publish** the content to the Web site. Note: Only the last approver in the approval chain sees this button. If no approval chain is assigned to the content's folder, every authorized user sees this button. *See Also:* "Setting Approval Chains" on page 786 This action also returns the changed content to the database and exits the editor.
Undo Checkout	Close the editor without saving changes.
Change Menu	
Comment	Briefly describe the content, or comment on changes made when editing content. The history comment appears on the View Content and Content History screens.

Menu Option	Description
Template	Lets you specify one or more templates for catalog entries in this folder. These entries use the specified template when appearing on your Web site. *See Also:* "Assigning Templates to Content" on page 77

eCommerce Analytics

The eCommerce Analytics screen provides a visual display of order information for a selected catalog entry.



- The top left section graphs the quantity of this catalog entry ordered over the past seven days
- The top right charts the number of orders that used a coupon versus the number that did not
- Below that pie chart is another that shows the number of returning customers versus the number of new ones

- The lower part of the screen shows the following order information

  - order number
  - date/time when order was entered
  - site from which order was entered
  - order status
  - customer information: new or returning, name, number of orders entered, value of all orders entered, average order monetary value
  - order monetary value
  - whether or not a coupon was used

eCommerce Recommendations

Adding Cross Sell and Upsell Recommendations to a Catalog Entry

Cross sell and upsell tactics are designed to increase the amount of cart sales.

Cross sell offers items related to a catalog entry. So, for example, if someone is purchasing a digital camera, cross sell items might be a carrying bag, digital photo printer, larger memory cards, additional warranty, etc.

Up Sell refers to similar but more expensive items. So, for example, if someone is viewing a 7 megapixel digital camera, upsell items might be a 10 megapixel camera, or a digital SLR camera.

The following sections explain how to assign cross sell and up sell items to any catalog entry, and how to display those options on your Web site.

See Also:

- ”Assigning Cross Sell and Upsell Items to a Catalog Entry” on page 1227

- "Displaying Cross Sell and Upsell Items on Your Web Site" on page 1227

Assigning Cross Sell and Upsell Items to a Catalog Entry

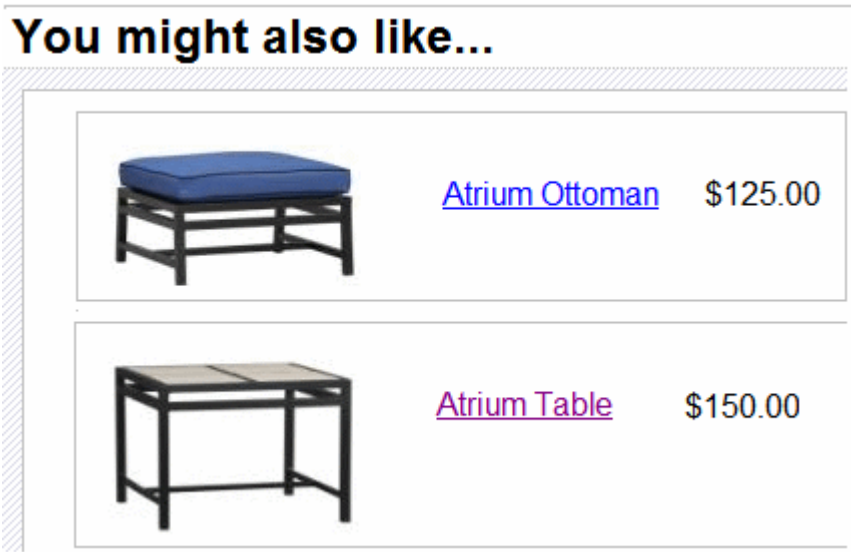
1. Open the catalog folder containing the catalog entry to which you want to assign cross sell items.
2. Click that entry.
3. Click **View > Cross Sell** or **View Upsell**.

4. Click the Add button ( ).
5. A screen displays all catalog folders.
6. Open the folder that contains the cross sell or upsell catalog entry.
7. Click that catalog entry.
8. Press **OK**.
9. Enter additional cross sell entries as needed.
10. Click **Action > Save**.

Displaying Cross Sell and Upsell Items on Your Web Site

Use the Recommendation server control to place cross sell or upsell items anywhere on a Web page. A single control can only show *either* cross sell *or* upsell items.

See Also: **Ektron CMS400.NET** Developer Manual > “Introduction to Ektron CMS400.NET Server Controls” > “eCommerce Server Controls” > “Recommendation Server Control”



eCommerce Order Management

The fulfillment aspect of eCommerce involves

- tracking submitted orders, including
  - order status
  - charge capture
  - shipping
  - cumulative sales information on customers

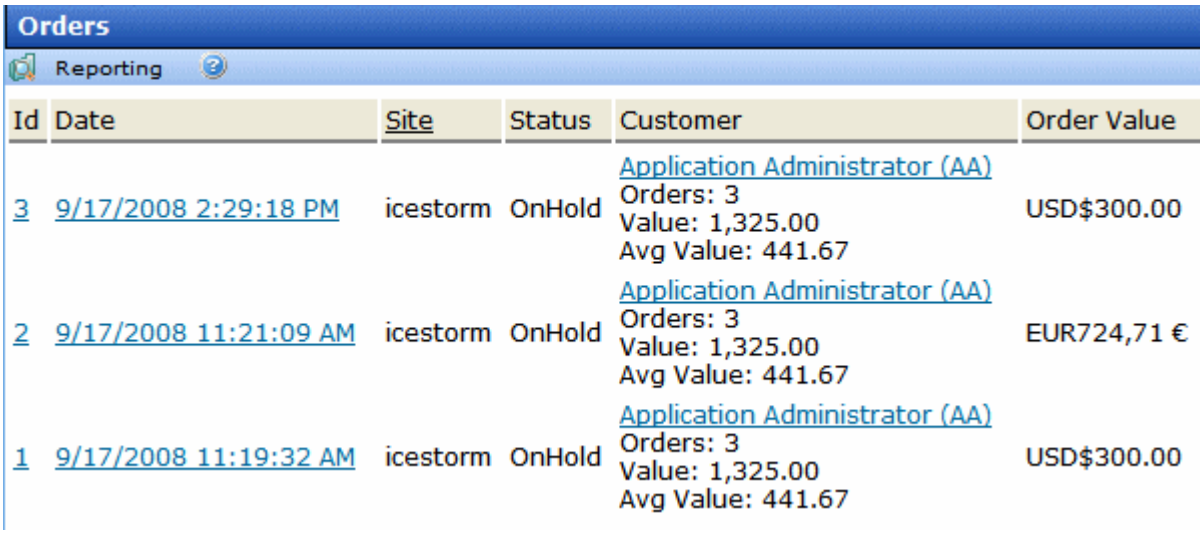
  For more information, see ”Orders” on page 1229.
- customer information, such as
  - orders submitted
  - addresses
  - current shopping carts

  For more information, see ”Customer Information” on page 1240.

Orders

The orders screen provides information about all orders in your eCommerce system. To access it, go to Ektron CMS400.NET **Workarea > Modules > Commerce > Fulfillment > Orders**.

IMPORTANT! In order to process orders, the Distributed Transaction Coordinator (DTC) Windows service must be running. It is started by default when you install Ektron CMS400.NET.



Initially, orders are sorted by submission date and time, with the most recent at the top.

See Also:

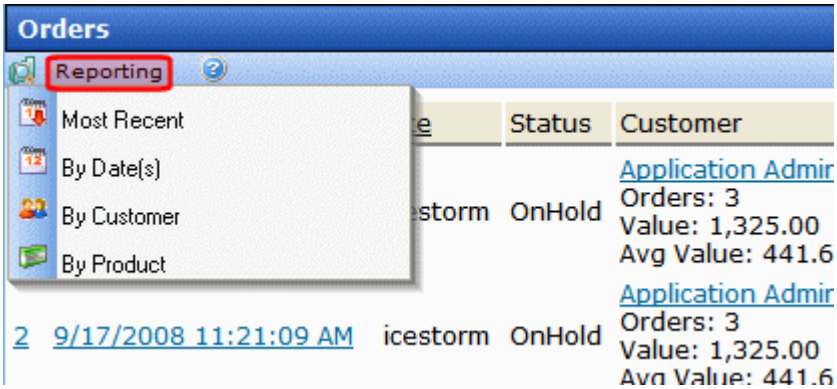
- "Selecting Orders by Criteria" on page 1230
- "Order Statuses" on page 1231
- "The View Order Screen" on page 1232
- "Capturing the Order" on page 1234
- "Cancelling the Order" on page 1237
- "Entering a Tracking Number" on page 1237
- "Marking the Order as Fraud" on page 1238

Selecting Orders by Criteria

You can select orders by any of the following criteria.

- entry date range
- customer
- catalog entry

To use any filter, click **Reporting** (see below) then the appropriate filter option.



NOTE The **Most Recent** menu option is the default select and sort order: all orders with the most recent on top.

See Also: "Orders" on page 1229

Order Statuses

NOTE The following table assumes you use the default workflow installed with eCommerce. If you customize the workflow, the following table may be inaccurate. *See Also:* Ektron CMS400.NET Developer Reference Manual section "Customizing Workflows."

Status	Description	How Set
Received	Order has been submitted.	Site visitor submits order
Fraud	Your organization has determined that the order is fraudulent.	View Order Screen > Action Menu > Mark as Fraud
Shipped	Order has been shipped Note: This status can be the workflow's end point. You do not need to use the Completed status.	View Order Screen > Action Menu > Ship Order or View Order Screen > Action Menu > Enter/Edit Tracking Number > Check **Mark as Shipped** checkbox and save

Status	Description	How Set
Completed	All order activities are finalized. No events can occur to a Completed order.	View Order Screen > Action Menu > Process Order
Cancelled	Order has been cancelled.	View Order Screen > Action Menu > Cancel Order
InProcess	Automatically assigned when order is submitted.	Order placed but not yet captured

The View Order Screen

To view the details of any order, click it. When you do, the View Order screen appears.

Action

Order ID: 10002

Application Administrator (AA)

Information about the person placing the order

Orders:	2
Total Order Value:	USD$1,300.00
Average Order Value:	USD$650.00

Notes (Edit)

Order notes

Status: InProcess

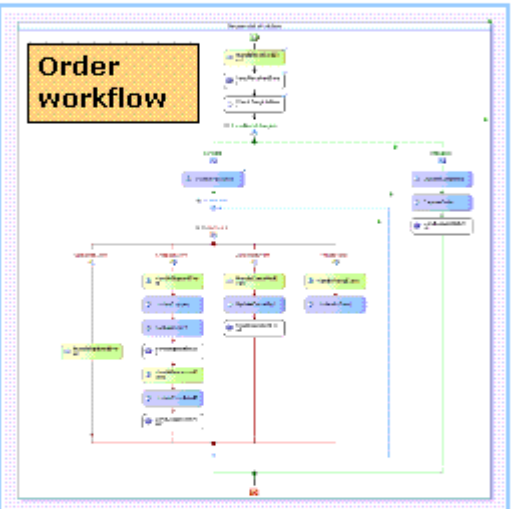
Date Created:	**3/9/2009 5:09 PM**
Date Authorized:	**3/9/2009 5:09 PM**
Date Captured:	-
Date Required:	-
Date Completed:	-
Date Shipped:	-

Order event dates

Payment(s):

3/9/2009 5:09:47 PM **USD$175.00**

Order workflow



View Workflow

Billing (Edit)

5 Hemenway Ave
Boston
Massachusetts, 02358
United States

Billing and shipping addresses

Shipping (Edit)

5 Hemenway Ave
Boston
Massachusetts, 02358
United States

Via Gold

Description	Sale Price	Quantity	Total
Atrium Ottoman	USD$125.00	1	USD$125.00
		Subtotal	USD$125.00
		Coupon Total	(USD$0.00)
		Tax	USD$0.00
		Shipping	USD$50.00
		Order Total	USD$175.00

Order details

NOTE If the View Workflow option does not display a flowchart, verify that the server's Distributed Transaction Coordinator (DTC) Windows service is running. It is started by default when you install Ektron CMS400.NET, but if it stops for some reason, the Workflow does not appear on this screen.

The View Order screen's **Action** menu has the following options.

- Capture - See "Capturing the Order" on page 1234
- Mark as Fraud - "Marking the Order as Fraud" on page 1238
- Enter Tracking Number - "Entering a Tracking Number" on page 1237
- Cancel Order - "Cancelling the Order" on page 1237

You can also edit the order's billing and shipping addresses. See "Editing an Order's Billing and Shipping Addresses" on page 1239.

These options are explained below.

Capturing the Order

Authorization versus Capture

Authorization occurs while a customer is using the Checkout server controls. It submits a customer's payment information to a payment gateway, bank, or PayPal, and returns either an approval with an authorization number (transaction ID) or a decline along with an explanation.

Capture is the process of submitting encrypted order information (including the transaction ID) to a payment gateway account, bank, or PayPal. At this time, the account is charged for the order amount.

NOTES
* In many states, you must ship an item before you can charge a customer's credit card for it.
* Items that are not tangible are automatically captured if paid by PayPal or a credit card. *See Also:* "Tangible Item" on page 1205

Next, you receive confirmation from the paying agency that the money has been deposited to your account and is available. At this time, you use the **Mark as Settled** option to inform the

eCommerce feature that payment has been received. This changes the order status to Complete.

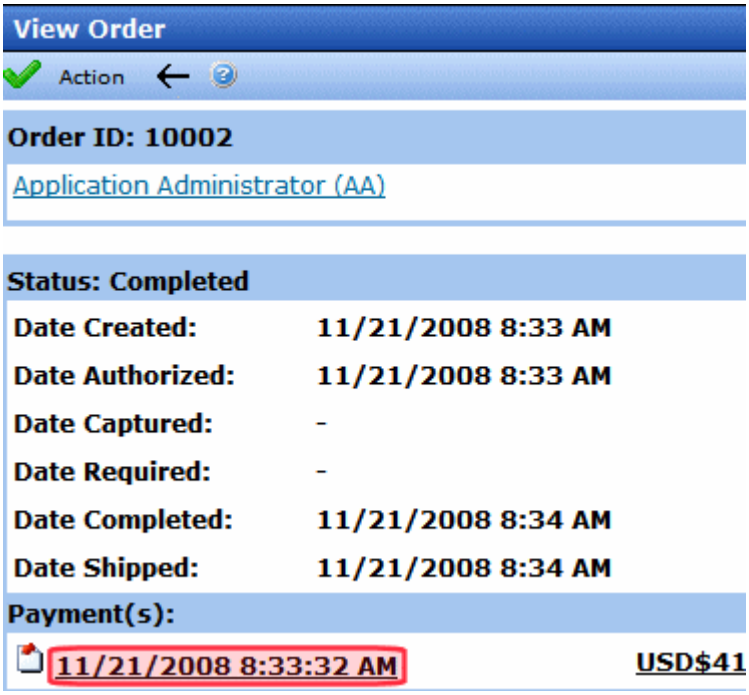
Payment Method	Tangible item	Intangible Item
PayPal or credit card	When goods are shipped	When customer submits order
Check	When check clears	When check clears

See Also: "Payment Options" on page 1113

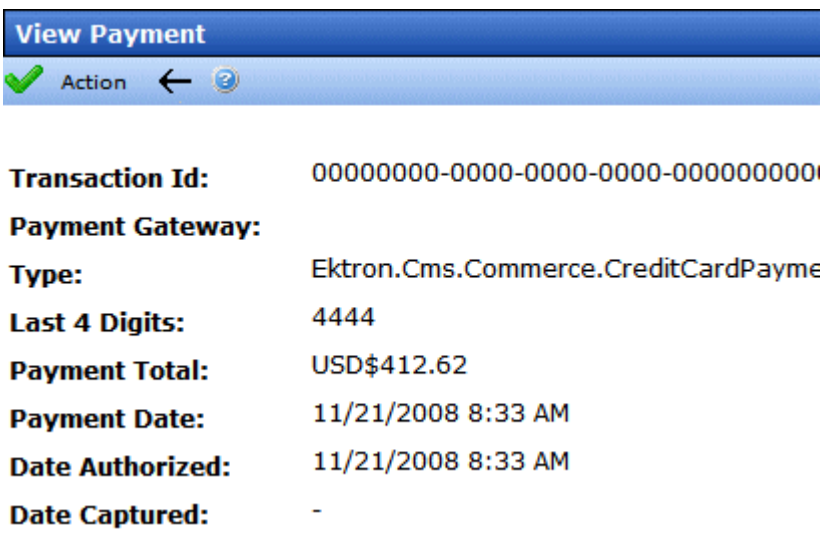
The Capture

To capture an order, follow these steps.

1. **Workarea > Modules > Commerce > Fulfillment > Orders**.
2. Click the order that you want to capture.
3. Click the **Payment** link (see illustration below).



4. The View Payment screen appears, showing information about the transaction captured when the site visitor submitted his payment information.



5. Click **Action > Capture**.

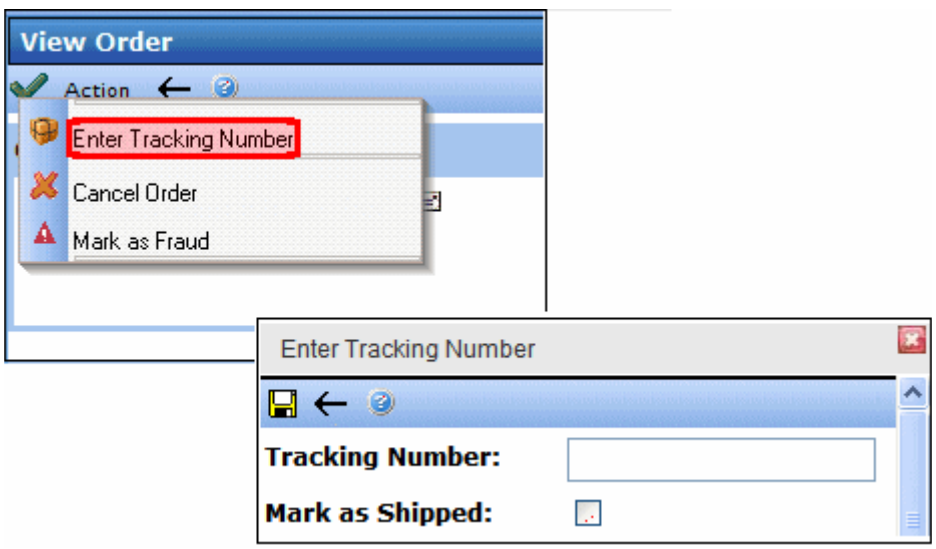
6. You are asked to confirm the action.
7. Click **OK**.

Cancelling the Order

Click **Action > Cancel Order** to stop all processing on the order. If you do, the order's status changes to Cancelled.

Entering a Tracking Number

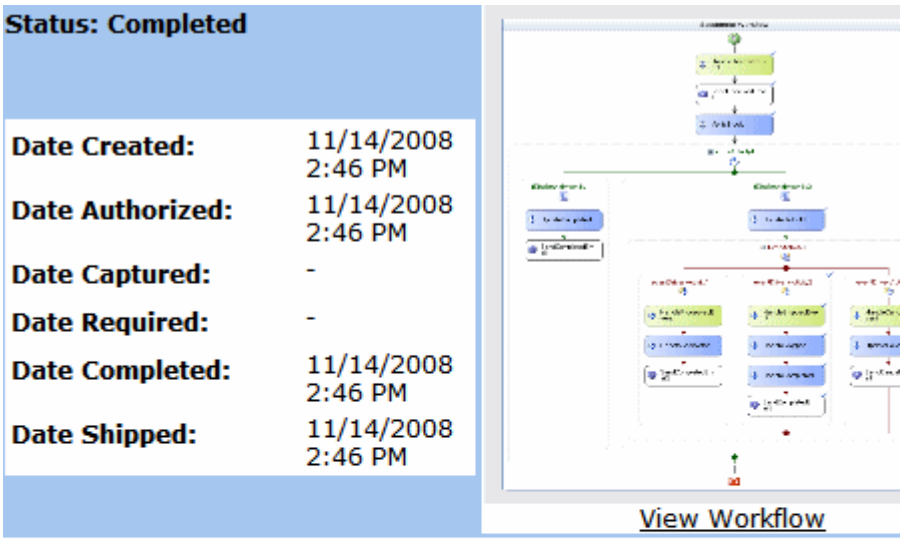
When an order is shipped, the shipping provider typically provides a tracking number to help locate the shipment within the delivery chain. Use the **Enter Tracking Number** option to enter this part of the order information.



After entering the tracking number, you can indicate whether the order has shipped.

Viewing the Tracking Number

You can see an order's tracking number on the View Order screen, under the **Shipping Address** (as illustrated below).



Marking the Order as Fraud

Use this option if your organization determines that the order is fraudulent. These orders cannot be processed any further.

Marking the Order as Shipped

To denote that an order has shipped, follow these steps.

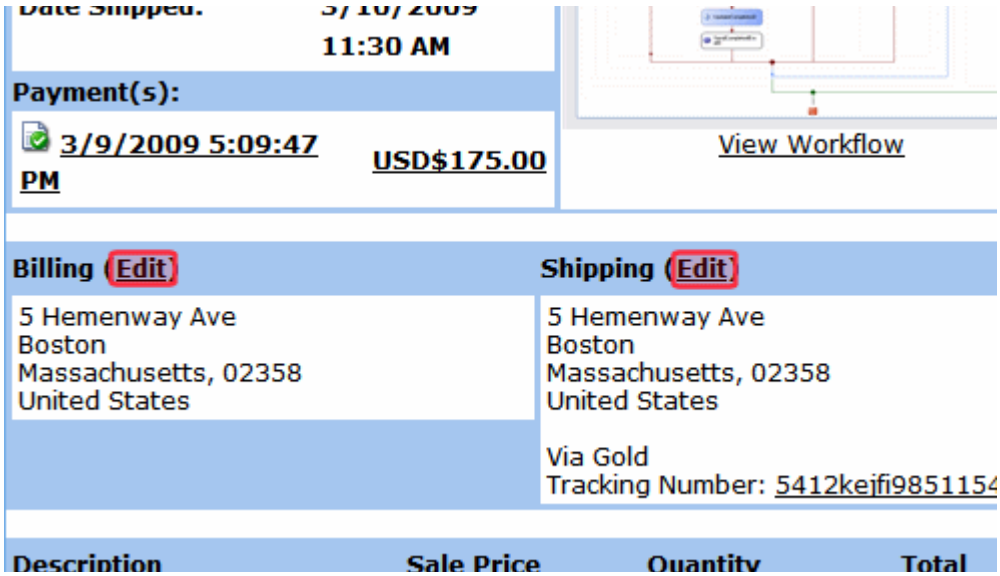
NOTE If that order has not yet been captured, it will be captured as part of the shipping of the order.

1. Go to **Modules > Commerce > Fulfillment > Orders**.
2. Click the order that is being shipped.
3. Click **Action > Ship Order**.

Alternatively, you can mark the order as shipped while entering its tracking number. *See Also:* "Entering a Tracking Number" on page 1237

Editing an Order's Billing and Shipping Addresses

To edit an order's billing or shipping address, click **Edit** as circled below.



Order Workflow

Ektron CMS400.NET uses Microsoft's Windows Workflow Foundation to create and implement order process workflows to handle the ordering process. The workflow can be as simple or complex as your business requires.

For example, you could have a simple workflow that sends one email to the customer when an order is received, and another to your shipping department. Or, you could have a more complex workflow that:

- sends an email to the customer when the order is received

- checks to see whether the item is a tangible product or a virtual product. Then, continues down the workflow path that's appropriate for the item.
- handles shipping notifications and updates the account throughout the
- shipping process
- handles the order if it is canceled
- handles the order if it is determined to be fraudulent
- marks the order as complete once all activities are finished

For more information on workflows, see the **Ektron CMS400.NET** Developer Manual section "Customizing Workflows."

Customer Information

Customers create an account the first time they complete the checkout procedure. The Customers screen provides information about all customers who order from your Web site. The first screen presents the

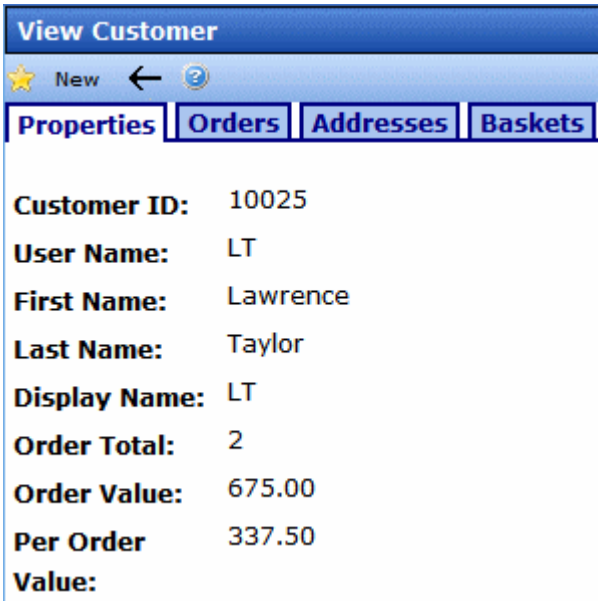
- customer ID number
- user name
- number of orders
- amount of all orders
- average order amount

You can click any customer's ID number or name to see more details about his order history. The View Customer screen (shown below) provides information about the customer's

- summary information (name, number of orders, total of all orders, average order amount)
- orders (see "Orders" on page 1229)
- addresses
  - You can edit any address or enter a new one (see "Entering a New Customer Address" on page 1241)

- Whenever a user creates a new order and enters a new or selects an existing billing/shipping address, that becomes the new default

- shopping carts (see "Viewing a Customer's Shopping Cart" on page 1242)



Entering a New Customer Address

Use this screen to enter a new address for a customer or edit an existing one. It may be used as the default billing address, shipping address, or both.

Use the following table to complete the screen.

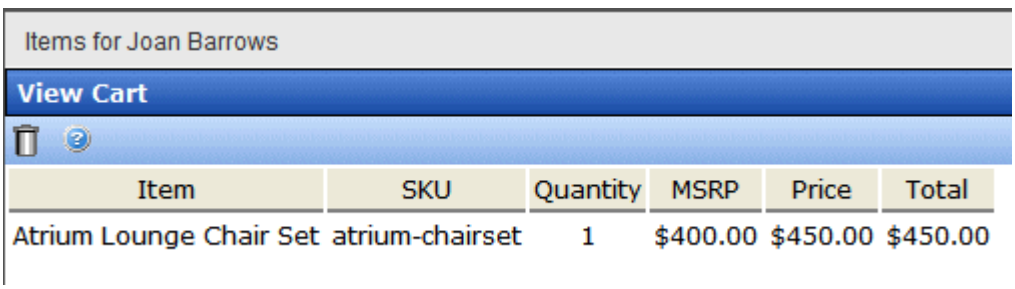
Field	Description
Name	Enter the customer's name.
Company	If available, enter the name of the customer's company.
Street Address	Enter the customer's street address.

Field	Description
City	Enter the customer's city.
Postal Code	Enter the customer's postal code.
Country	Select the customer's country from the pull-down list. *See Also:* "Countries" on page 1097
State/Province	Select the customer's state or province from the pull-down list. *See Also:* "Regions" on page 1101
Phone	Enter the customer's phone number. You can add characters or spaces between groupings if you wish. For example: 603-594-0249.
Default Billing	If you want this address to appear by default as the billing address whenever this customer makes a purchase, check this box.
Default Shipping	If you want this address to appear by default as the shipping address whenever this customer makes a purchase, check this box.

Viewing a Customer's Shopping Cart

To view active shopping carts for a customer, follow these steps. After viewing the carts, you can delete any of them.

1. **Modules > Commerce > Customers**.
2. Click a customer ID number.
3. Click the **Baskets** tab.
4. Click the ID number of the shopping cart that you want to view.
5. A View Cart screen shows information for items in the cart.



Deleting a Shopping Cart from the Workarea

Follow these steps to delete a shopping cart from the **Ektron CMS400.NET** Workarea.

1. Access the View Cart screen by following the steps in ”Viewing a Customer’s Shopping Cart” on page 1242.
2. Click the delete button ( ).
3. A confirmation message appears. Click **OK**.

eCommerce Coupons

Most eCommerce sites periodically offer coupons to provide discounts to customers, either to attract new business or reward loyalty. **Ektron CMS400.NET**'s eCommerce feature provides a coupon generation capability with the following features.

- discount can be an amount or percentage
  - if percentage, you can set a maximum coupon value regardless of the amount calculated by percentage
- restrict coupon to catalog entries that you approve
- restrict coupon to most or least expensive entry
- limit to one use per customer
- prevent coupon from being used with other coupons
- specify a maximum number of redemptions
- specify a minimum order amount required to activate coupon
- designate a date range when coupon is active

Creating a Coupon

Create coupons in the **Ektron CMS400.NET** Workarea by going to **Modules > Commerce > Catalog > Coupons**. To make it easy to complete the information, the screens are arranged in numbered steps. Subsequent screens are context-sensitive, so that you only see fields that are a logical result of previous decisions.

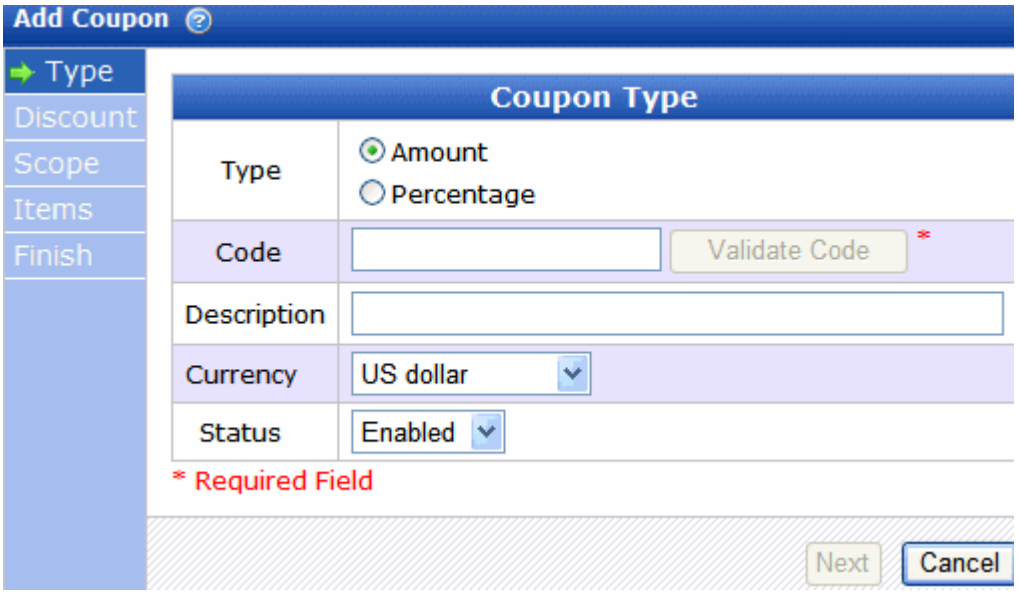
The following table summarizes the information collected on each screen.

Screen	Information collected	For more information, see
1. Type	• code (that is, unique identifier) • description • whether discount is based on amount or percentage • currency (applicable to amount-based coupons only) • enabled or disabled	"Completing the First Coupon Screen (Type)" on page 1246
2. Discount	• If amount, dollar amount • If percentage, percentage and maximum coupon value	"Completing the Second Coupon Screen (Discount)" on page 1248
3. Scope	• applies to entire cart, approved items only, most/least expensive item only • limit to one per customer? • allow combination with other coupons? • maximum number of redemptions • minimum cart value • start and end dates	"Completing the Third Coupon Screen (Scope)" on page 1250
4. Items	If coupon is restricted to certain items, designate the items	"Completing the Fourth Coupon Screen (Items)" on page 1252

See Also:

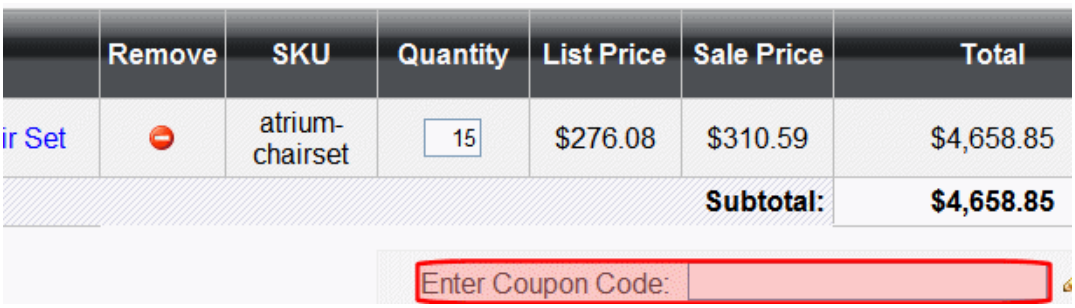
- "Disabling a Coupon" on page 1255
- "Deleting a Coupon" on page 1256

Completing the First Coupon Screen (Type)



Use the following table to complete the first coupon screen.

Field	Description
Type	Select the type of coupon you are creating/editing. • **Amount** - discount is a dollar amount. If you select this type, choose a currency at the **Currency** field (below). Then, enter the dollar amount on the **Discount** screen. *See Also:* "Amount Based Coupon" on page 1248 • **Percentage** - discount is a percentage. If you select this type, enter the percentage on the **Discount** screen. That screen also lets you enter a maximum amount. *See Also:* "Percentage Based Coupon" on page 1249 Also, if the coupon type is **percentage**, the **Currency** field is disabled. Percentage-based coupons are currency neutral.

Field	Description
Code	Enter the coupon code. The code cannot contain • spaces • angle brackets (<, >) • single (‘) or double quotes (“) • ampersand (&) • slash (/) or back slash (\) • plus sign (+) When done, click the **Validate Code** button. When you do, **Ektron CMS400.NET** verifies that the code contains the correct characters and is not already in use. Tip! The following page gives suggestions about eCommerce coupons, including coupon-naming strategies: http://www.ecommerce-guide.com/solutions/advertising/article.php/3667331 Site visitors enter this code to redeem the coupon on a page that hosts the Cart server control (see image below).
	
Description	Enter a free text description of the coupon. This helps describe it on the initial Coupons screen in the **Ektron CMS400.NET** Workarea.
Currency	Select the currency to which this coupon applies. A dropdown list of all enabled currencies is available. *See Also:* ”Currencies” on page 1105 If the coupon type is percentage, this field is disabled. Important! The coupon is only valid if a site visitor selects this currency. So, for example, if you create a coupon for a USD amount, and a site visitor selects Euros when shopping on your site, the coupon is not accepted. To work around this restriction, create a coupon for every applicable currency.

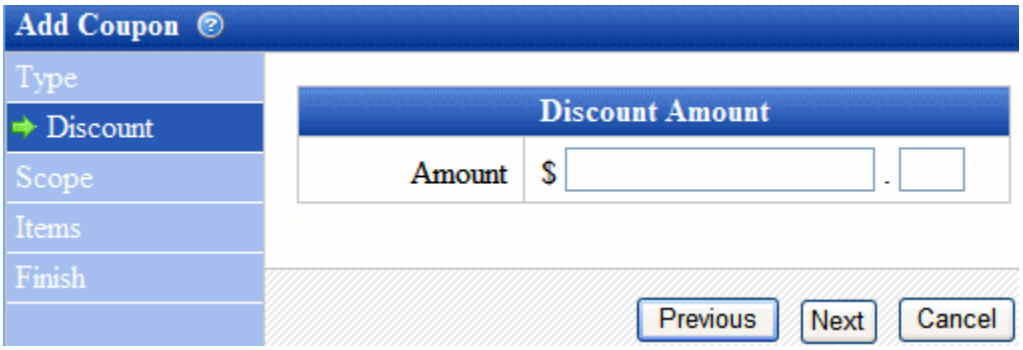
Field	Description
Status	Set to **enabled** to let site visitors uses this coupon (providing all other conditions are met). Or, set to **disabled** to keep the coupon in the eCommerce feature but prevent it from being used.

Completing the Second Coupon Screen (Discount)

- "Amount Based Coupon" on page 1248
- "Percentage Based Coupon" on page 1249

Amount Based Coupon

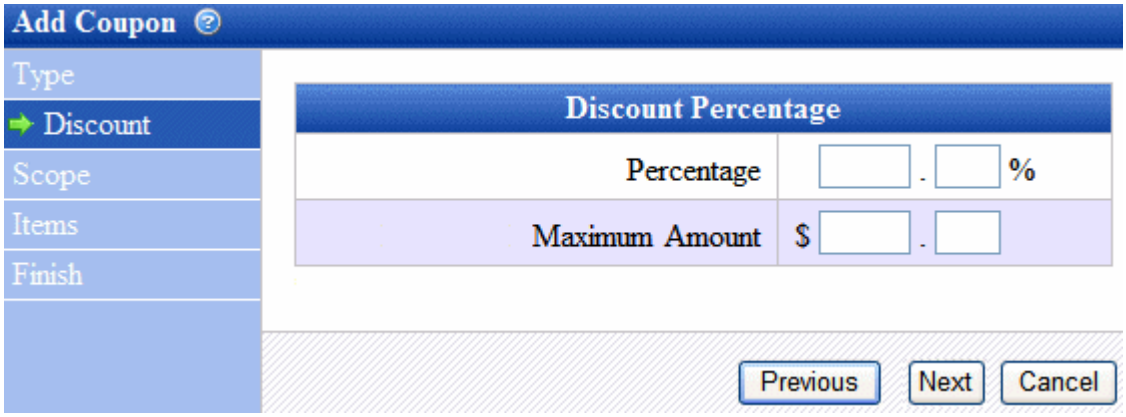
See Screen Sample



Use the following table to complete the second coupon screen if the coupon is based on amount.

Field	Description
Amount	Enter the coupon's discount amount. Note: If the coupon amount exceeds the sum of all items to which it is applied, it is reduced to the sum of the items. For example, a coupon amount is $10.00 and applies to the least expensive item. If that item is $3.00, the amount changes to $3.00.

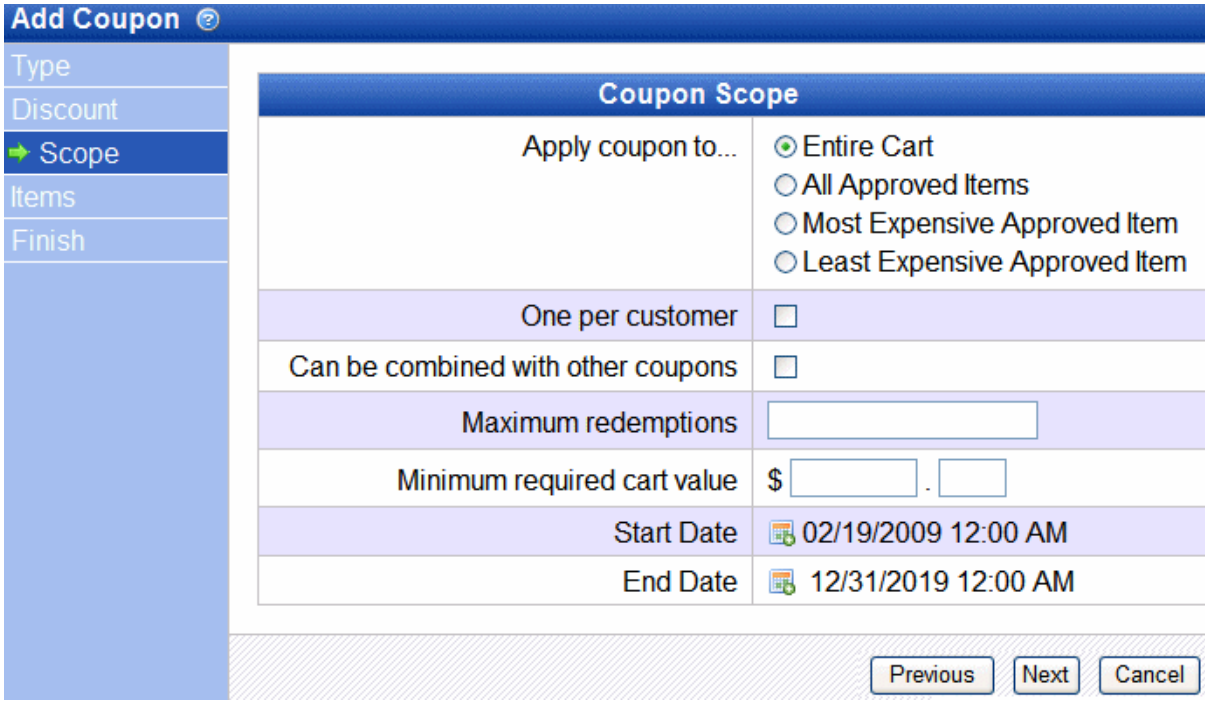
Percentage Based Coupon



Use the following table to complete the second coupon screen if the coupon is based on percentage.

Field	Description
Percentage	Enter the percentage of the discount.
Maximum Amount	Enter the maximum value of this coupon. For example, if you set a discount of 10% and a **Maximum Amount** of $20.00, the discount will never exceed $2.00 (that is, 10% of the **Maximum Amount**) regardless of the amount of the goods ordered. Typically, you would include a Maximum Amount in the email or announcement that describes the coupon.

Completing the Third Coupon Screen (Scope)

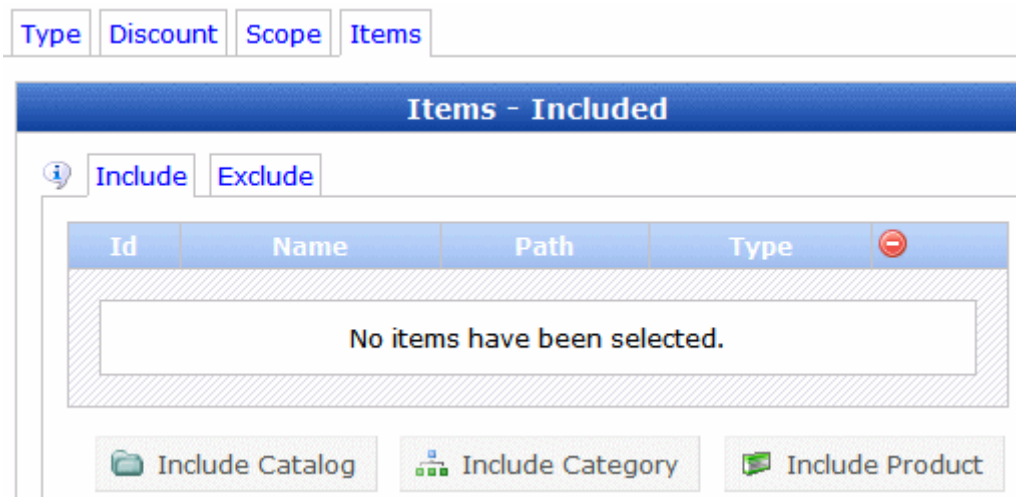


Use the following table to complete the coupon **Scope** screen.

Field	Description
Apply Coupon to	• **Entire cart** - coupon applies to all items in cart • **All approved items** - coupon applies all *approved* items in cart. Items are approved on the **Items** screen. • **Most expensive approved item** - coupon applies to most expensive *approved* item in the cart. Items are approved on the **Items** screen. • **Least expensive approved item** - coupon applies to least expensive *approved* item in the cart. Items are approved on the **Items** screen. Important: If you select **All approved items**, **Most expensive approved item**, or **Least expensive approved item**, you must identify approved items on the **Items** tab. If you do not, the coupon is effectively inactive. Note: You cannot apply a *cart-level* coupon to a subscription product. However, you can apply an *item-level* coupon to a subscription product. (An an *item-level* coupon is one that applies to all approved items, or the most or least expensive item.) *See Also:* "Creating a Subscription" on page 1181
One Per Customer	Check this box if you want to limit each customer to one use of the coupon. If you do and a site visitor completes an order with the coupon then tries to use it a second time, he is notified that the coupon is not valid.
Can be combined with other coupons	Check this box if this coupon can be combined with other coupons in the same order. If you do not check this box and a site visitor tries to add this coupon to an order to which a coupon is already applied, he is notified that the coupon is not valid.
Maximum Redemptions	If desired, enter a maximum number of times this coupon can be used. It does not matter which site visitors use the coupon. If you set a maximum, and the coupon is applied that number of times, the next time someone tries to use the coupon, he is informed it is not valid.
Minimum Required Cart Value	If desired, enter the minimum order amount required to activate this coupon. The order amount does not include tax or shipping charges. For example, enter **$50.00**. If a shopping cart total is $40.00, and a site visitor adds this coupon to an order, he is informed the coupon is not valid.

Field	Description
Start Date/End Date	Enter the date range within which this coupon is valid. For example, you enter a **Start Date** of January 1, 2008 and an **End Date** of December 31, 2008. If a site visitor inserts this coupon on February 9, 2009, he is informed the coupon is not valid.

Completing the Fourth Coupon Screen (Items)



Use the following table to complete the **Items** coupon screen.

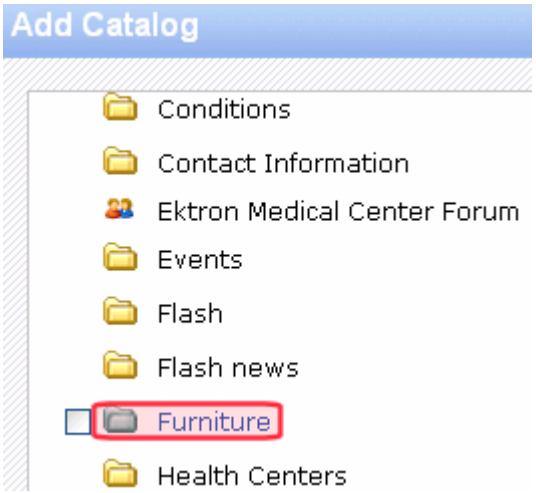
Field	Description
Include/ Exclude	Use this screen to identify items to which this coupon applies if the Coupon Scope screen's **Apply Coupon to** field is set to • All Approved Items • Most Expensive Approved Item • Least Expensive Approved Item **Important!** - Item-level coupon types apply *only* to items selected on this screen. If a site visitor orders a catalog entry that's not defined on this screen, an item-level coupon does not apply to the item. For example, you create a coupon worth 10% off any digital camera. The coupon is only applicable if a digital camera is in the shopping cart. Typically, the email or announcement that describes the coupon includes item restrictions. The discount is applied to each approved item in the cart. For example, a coupon provides a 10% savings on items 1, 3, and 5 but not 2 and 4 because 2 and 4 are not on the approved items list. *See Also:* "Selecting a Coupon's Approved Items" on page 1253; "Include vs. Exclude" on page 1255

Selecting a Coupon's Approved Items

There are three ways to select items to add to the Include or Exclude list. You can select

- **individual items** - click the **Include Product** button and navigate through the **Ektron CMS400.NET** folder system to that content. You can only select items in a category folder (which are blue to distinguish them from regular folders).

- **all items in a catalog folde**r - click the **Include Catalog** button and navigate through the **Ektron CMS400.NET** folder system to that folder. You can only select items in a category folder (which are blue to distinguish them from regular folders).



- **all items in a taxonomy or category** - click the **Include Category** button and navigate through the **Ektron CMS400.NET** taxonomies to the desired taxonomy or category. All content applied to the category will be eligible for the coupon.

Include vs. Exclude

You can both include and exclude using any of the criteria listed above. If any product appears on both lists, it is *excluded* from coupon eligibility.

So for example, one of your folders contains 500 digital cameras that your site offers. You want the coupon to apply all but a few cameras.

On the **Include** tab, select the cameras folder. Then, use the **Exclude** tab to select the few cameras to which the coupon does not apply. In this way, you can easily select the majority of items but exclude a few.

Disabling a Coupon

When the coupon's status is Disabled, site visitors can no longer apply it to an order.

Coupons can be disabled automatically (according to a schedule) or manually.

Using an Expiration Date to Disable a Coupon

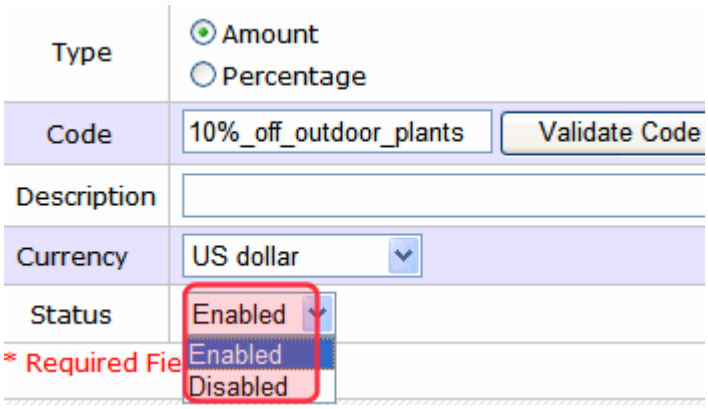
When you create a coupon, a default end date is set for 10 years from the end of the current year. At that time or at any time the coupon is active, you can change its end date.

When the coupon's end date is reached, its status changes to Disabled.

Manually Disabling a Coupon

To disable an active coupon, follow these steps.

1. Go to **Ektron CMS400.NET** Workarea > Modules > Commerce > Coupons.
2. Locate the coupon that you want to delete.
3. Go to its **Type** screen.
4. Change its **Status** field to **Disabled** (see below).

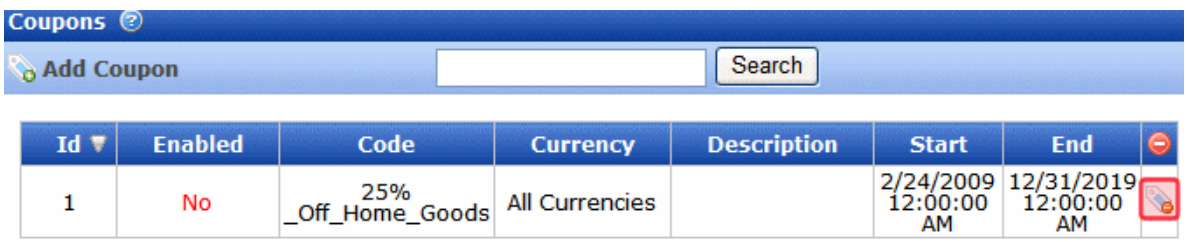


Deleting a Coupon

IMPORTANT! You cannot delete a coupon that is applied to any order within Ektron CMS400.NET.

Follow these steps to delete a coupon that is not applied to an order. If a coupon is applied to an order, you cannot delete it but you can disable it. See "Disabling a Coupon" on page 1255.

1. Go to **Ektron CMS400.NET Workarea > Modules > Commerce > Coupons**.
2. Locate the coupon that you want to delete.
3. Click the delete button on the far right of the coupon information (circled below).



4. A strike through line appears over all coupon text, and a Restore button ( ) replaces the delete button.

NOTE If you change your mind and do not want to delete the coupon, click the Restore button.

5. Click the Save button ( ).

If the coupon cannot be deleted (because it is applied to an order), it remains on the main Coupons screen and **No** appears in the **Enabled** field. This coupon can no longer be used.

Using eSync with eCommerce

When using eSync with an eCommerce site, you will want to prevent orders from being processed on your staging server. This is to prevent orders from being processed twice.

For example, a customer on your production site purchases a product. If the staging server and production server are synced before the credit card is processed, the potential exists for the customer's credit card to be charged twice; once from the production server and again from the staging server.

To prevent orders from being processed on your staging server, edit your staging site's web.config file. Next, set the following property to true.

```
<add key="ek_ecom_OrderProcessingDisabled" value="true" />
```

Once the property is set to true, you cannot process or edit orders from the Workarea's View Order screen on the staging server. Also, if you try to create an order from the staging server's Web site, you receive the following message.

> "***We're sorry, an error occurred while processing your request. Please try again later...***"

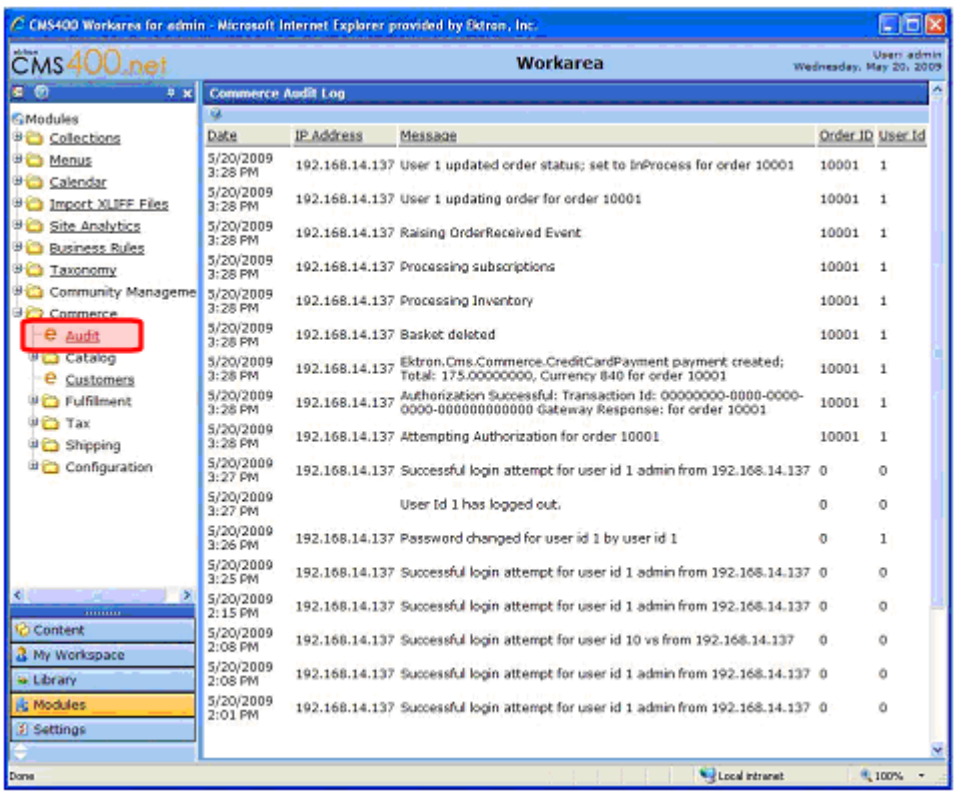
It is important to note that all other eSync functions still work properly. For example, when you create catalog entries on a staging server and perform a sync, the entries will be moved to the production server. This key only affects the processing of orders.

The eCommerce Audit Screen

As an Administrator, you should regularly review the eCommerce Audit log. This is vital to keeping your site secure and will help you determine the source when data is compromised.

While it is important that CMS400.NET captures this information, it is even more important that you review, analyze and use it. For example, while reviewing eCommerce event logs in CMS400.NET, you might find that one of your eCommerce administrators has an unusually large amount of login failures. This could be a sign someone is trying to break into your system.

You can view a log of your CMS400.NET Web site's eCommerce activity in the **Workarea** > **Modules** > **Commerce** > **Audit screen**.


CMS400 Workarea for admin - Microsoft Internet Explorer provided by Ektron, Inc.
CMS400.net
Workarea
Commerce Audit Log
Modules
Collections
Menus
Calendar
Import XLIFF Files
Site Analytics
Business Rules
Taxonomy
Community Manageme
Commerce
Audit
Catalog
Customers
Fulfillment
Tax
Shipping
Configuration
Content
My Workspace
Library
Modules
Settings
Date
IP Address
Message
Order ID
User Id
5/20/2009 3:28 PM 192.168.14.137 User 1 updated order status; set to InProcess for order 10001 10001 1
5/20/2009 3:28 PM 192.168.14.137 User 1 updating order for order 10001 10001 1
5/20/2009 3:28 PM 192.168.14.137 Raising OrderReceived Event 10001 1
5/20/2009 3:28 PM 192.168.14.137 Processing subscriptions 10001 1
5/20/2009 3:28 PM 192.168.14.137 Processing Inventory 10001 1
5/20/2009 3:28 PM 192.168.14.137 Basket deleted 10001 1
5/20/2009 3:28 PM 192.168.14.137 Ektron.Cms.Commerce.CreditCardPayment payment created; Total: 175.00000000, Currency 840 for order 10001 10001 1
5/20/2009 3:28 PM 192.168.14.137 Authorization Successful: Transaction Id: 00000000-0000-0000-0000-000000000000 Gateway Response: for order 10001 10001 1
5/20/2009 3:28 PM 192.168.14.137 Attempting Authorization for order 10001 10001 1
5/20/2009 3:27 PM 192.168.14.137 Successful login attempt for user id 1 admin from 192.168.14.137 0 0
5/20/2009 3:27 PM User Id 1 has logged out. 0 0
5/20/2009 3:26 PM 192.168.14.137 Password changed for user id 1 by user id 1 0 1
5/20/2009 3:25 PM 192.168.14.137 Successful login attempt for user id 1 admin from 192.168.14.137 0 0
5/20/2009 2:15 PM 192.168.14.137 Successful login attempt for user id 1 admin from 192.168.14.137 0 0
5/20/2009 2:08 PM 192.168.14.137 Successful login attempt for user id 10 vs from 192.168.14.137 0 0
5/20/2009 2:08 PM 192.168.14.137 Successful login attempt for user id 1 admin from 192.168.14.137 0 0
5/20/2009 2:01 PM 192.168.14.137 Successful login attempt for user id 1 admin from 192.168.14.137 0 0

To turn eCommerce Logging on, open the Web site's web.config file and change the following key to **true**.

```
<add key="ek_ecom_ComplianceMode" value="false"/>
```

When compliance mode is turned on, Ektron CMS400.NET logs and displays the following events.

- Actions affecting administrators (Administrator Group member, Commerce Admin Role, Builtin Account).
  - An Administrator logs in or out
  - An Administrator's login attempt fails
  - An Administrator password is changed
- Actions affecting an **Ektron CMS400.NET** user's rights to eCommerce.
  - Adding a user to the Commerce Admin Role
  - Removing a user from the Commerce Admin Role
  - Adding a user to the Admin group
  - Removing a user from the Admin group
- Actions affecting order information.
  - Updates to an order's address
  - The transaction ID and response from the payment gateway
  - Any action conducted with the payment gateway. For example, when capturing a previously authorized transaction.
  - Workflow activities. For example, sending an email.
  - Whenever the default gateway or payment options are changed in the Workarea.

Introduction to eSync

Ektron's eSync revolutionizes the way that Web sites are built, deployed and maintained and is the only synchronization solution that can keep Web sites up-to-date efficiently, giving you a level of control over your site that was impossible before. From single sites, to global multi-sites, to server farms, eSync gives you scalable, geo-synchronization capabilities that allow you to easily update exactly what you want, when you want to.

The following videos introduce eSync.

- http://media.ektron.com/flash/esync/800x600/esync.html
- http://media.ektron.com/webinars/esync/esyncwebinar.html

eSync moves only the changes you want to move, from single pieces of content to entire sites, making updates efficient and eliminating site downtime. With its intelligent synchronization technology, eSync is able to securely move selected content bidirectionally: Web 2.0 sites have a wealth of user-generated content and membership information. That data can now be synchronized back to the development side of the firewall.

By employing certificate-based authentication to secure your Web site, Ektron's eSync lets CMS users update content anywhere safely, whether it is on a production server or within the development environment. Alternatively, all of your updates can take place on the safe side of your firewall before they are moved to the live site.

If conflicting versions of content exist, eSync's configurable conflict resolution engine ensures that you won't lose your most up-to-date content. The version that isn't posted is saved in a history, along with other previous versions, enabling you to track changes or restore content if the need arises.

Within complex IT infrastructures, eSync can synchronize content, assets, HTML pages and other components of your Web site, whether it is managed by CMS400.NET or not.

Synchronization can be scheduled to take place at strategic times that assure optimal performance while facilitating site updates. Global multi-site setups can take advantage of this to coordinate synchronizations with servers around the world, taking advantage of low traffic periods. Or, use eSync's scheduling feature to set up time-sensitive events. Synchronization can take place with single or multiple servers, whatever your needs are.

eSync's ability to move and copy data is unparalleled, and it offers a host of options for managing multiple servers. If there is a need for multiple development servers, eSync can create another copy of the live site for you to work with. As your developers build out changes to the site, their updates can by synchronized to the staging and production servers. eSync can also support advanced infrastructures, including load balancing and failover server configurations.

Ektron's eSync is the only solution in the marketplace today that gives you the level of control you need to keep your Web sites completely up-to-date. Whatever your Web site structure is, Ektron's synchronization technology lets updates happen efficiently and quickly, and provides the tools to deal with today and tomorrow's information-hungry world.

eSync is more fully explained through these topics.

- "Setting Up eSync" on page 1263
- "eSync Requirements" on page 1303
- "Characteristics of eSync" on page 1304
- "Managing eSync Security Certificates" on page 1313
- "Using eSync to Initialize a New Site" on page 1324
- "Running a Sync" on page 1339
- "Content and Folder Sync Options" on page 1348
- "eSync in a Load Balanced Environment" on page 1355
- "Using eSync in a Multi-site Environment" on page 1364
- "Using eSync with eCommerce" on page 1370
- "eSync Troubleshooting" on page 1371

Setting Up eSync

This chapter helps you install and start using **Ektron CMS400.NET**'s eSync. For full details about the feature, see "Using eSync" on page 1303.

For this configuration	See this section
Two sites on same server	"Scenario 1: Synching Two Sites on the Same Server" on page 1263
One Local to one Remote server	"Scenario 2: Synching an Ektron CMS400.NET Server with Another Server" on page 1264
Development to Staging to Production servers	"Scenario 3: Setting up a Development > Staging > Production Environment" on page 1276

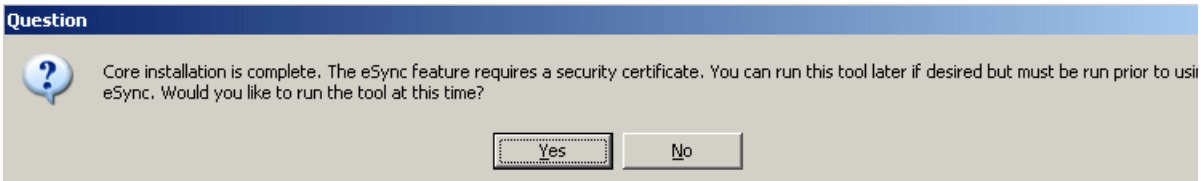
Scenario 1: Synching Two Sites on the Same Server

Although it is unlikely that you will use this configuration in "real-life" situations, it the simplest way to begin testing and learning how eSync works.

1. Install the first site.

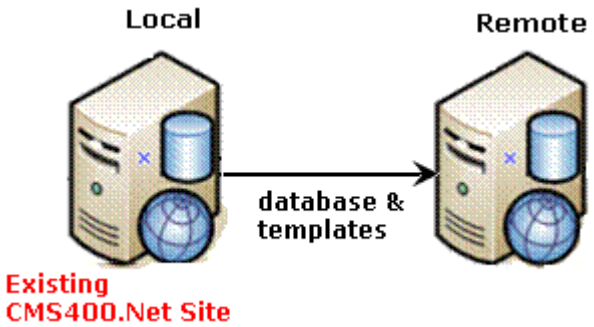
   See Also: **Ektron CMS400.NET** Setup Manual sections "Installing Ektron CMS400.NET" and "Installing the Minimum and Starter Sites."

2. Near the end of the installation, the following dialog appears.


Question
Core installation is complete. The eSync feature requires a security certificate. You can run this tool later if desired but must be run prior to usi
eSync. Would you like to run the tool at this time?
Yes
No

3. Click **Yes**.
4. Install a second site on the same server.
5. Near the end of the installation, the same dialog appears.
6. Click **Yes**.
7. Both sites' security certificates have been set up and configured. Continue from "Part Three: Connect the Local and Remote Servers" on page 1269.

Scenario 2: Synching an Ektron CMS400.NET Server with Another Server



This scenario assumes you have **Ektron CMS400.NET** on one server (call it local), and want to sync it with another (call it remote). To accomplish this, you install a minimal **Ektron CMS400.NET** site to the new, remote server. Next, use eSync to upload your **Ektron CMS400.NET** site from the local to the remote server.

After the you complete the initial and template syncs explained in this chapter, the two sites are a mirror image of each other.

Follow these steps to configure two servers to sync with each other.

Prerequisites - See "eSync Requirements" on page 1303

- "Part One: Set up a Min Site on the Remote Server" on page 1265
- "Part Two: Generate and Copy Security Certificates" on page 1265
- "Part Three: Connect the Local and Remote Servers" on page 1269
- "Part Four: Upload the Local Server's Database to the Remote Server" on page 1272
- "Part Five: Upload the Local Server's Templates to Remote" on page 1274

Part One: Set up a Min Site on the Remote Server

1. Upgrade the local server to the latest version of **Ektron CMS400.NET** if necessary.
2. On the remote server, install a minimum site whose **Ektron CMS400.NET** version matches the version on the local server.

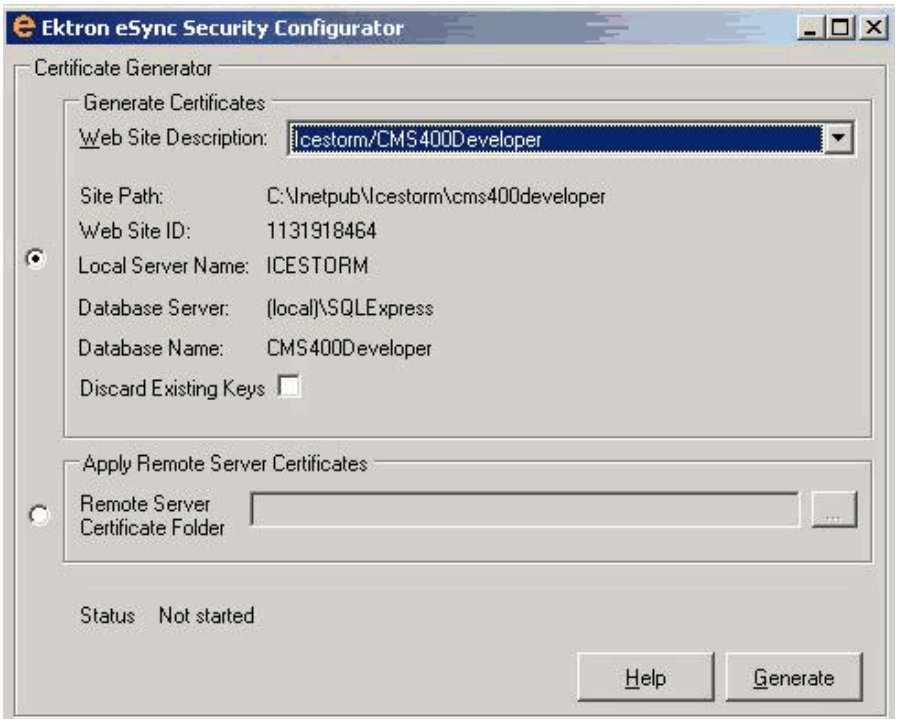
   To do this, run the **Ektron CMS400.NET** base installation file (CMS400Base7x.exe). For more information, see the **Ektron CMS400.NET** Setup manual.
3. If the current site with which you will sync is precompiled, you must also precompile the min site.

Part Two: Generate and Copy Security Certificates

Security certificates authorize the synchronization of files between servers. In this part, you generate security certificates on the local server, then copy them to the remote.

Follow these steps to complete this procedure.

1. Sign on to the local server.
2. Click the **Windows Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
3. The following screen appears.



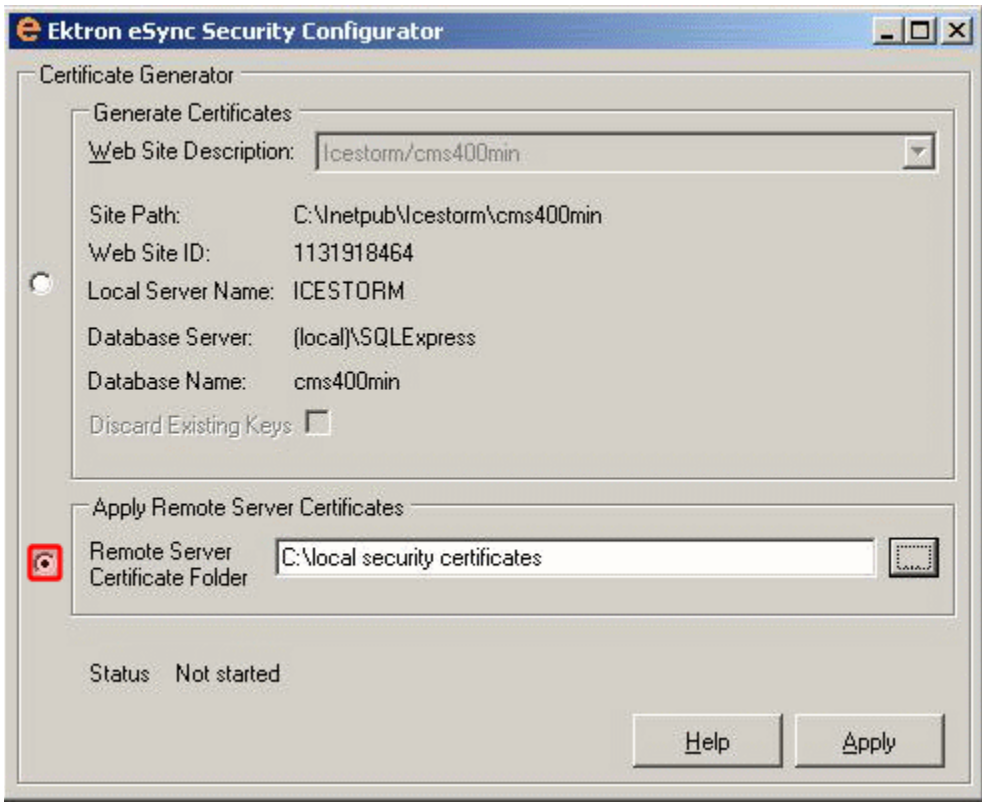
4. At the **Web Site Description** field, select the Web site on the local server.
5. Press **Generate**.
6. The certificates are created on the local server.
7. Close the Security Configurator dialog.
8. Open two Windows Explorer windows side-by-side: one showing the local server's file system, and the other showing the remote server's file system.
9. In the remote server window, create a folder underneath the root folder. Name the folder **local security certificates**.

WARNING! Do not create the new folder under the web root, C:\inetpub\wwwroot.

10. In the local server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
11. From that folder, copy these files.
    - *servername*_SyncClient.pfx
    - *servername*_SyncClient.pvk
    - *servername*_SyncClient.cer
    - *servername*_SyncServer.pfx
    - *servername*_SyncServer.pvk
    - *servername*_SyncServer.cer
12. Paste the files into the folder you created in Step 9. Make sure there are no other security files in the folder.
13. Close both windows you opened in Step 8.

NOTE After copying security certificates to the remote folder, you need to register and move them to the correct folders. The Security Configurator screen does this.

14. Sign on to the remote server.
15. Open the security configurator screen using this path: **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
16. The security configurator screen appears.



17. Click the **Apply Remote Server Certificates** button (circled above).
18. Click the **Browse** button next to that field.
19. Browse to the folder to which you pasted the security certificates in Step 12.
20. Click the **Apply** button.
21. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the remote server.

Next, you need to generate security certificates on the remote server, then copy them to the local.

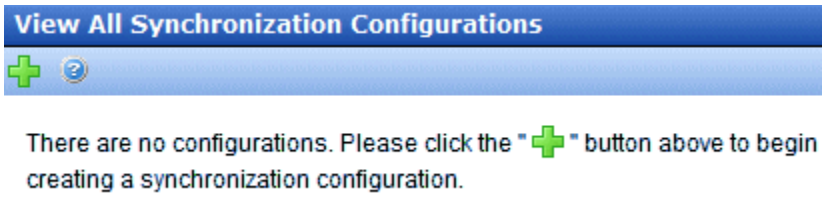
To accomplish this, follow all steps in "Part Two: Generate and Copy Security Certificates" on page 1265, but this time, consider the remote server to be the local server and vice versa.

Now that you have generated and copied security certificates between servers, you can set up eSync.

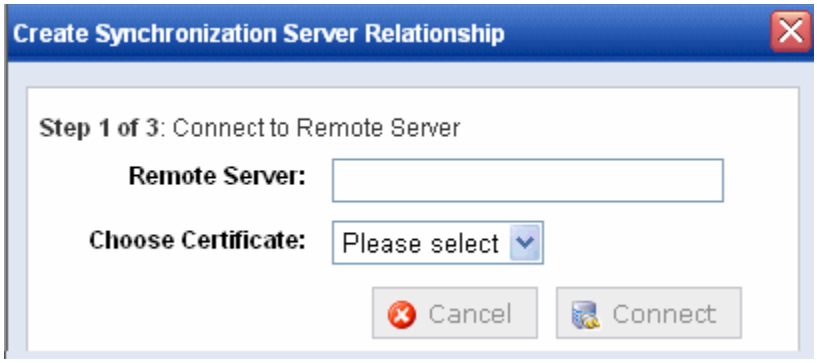
Part Three: Connect the Local and Remote Servers

WARNING! Back up your database before beginning this procedure!

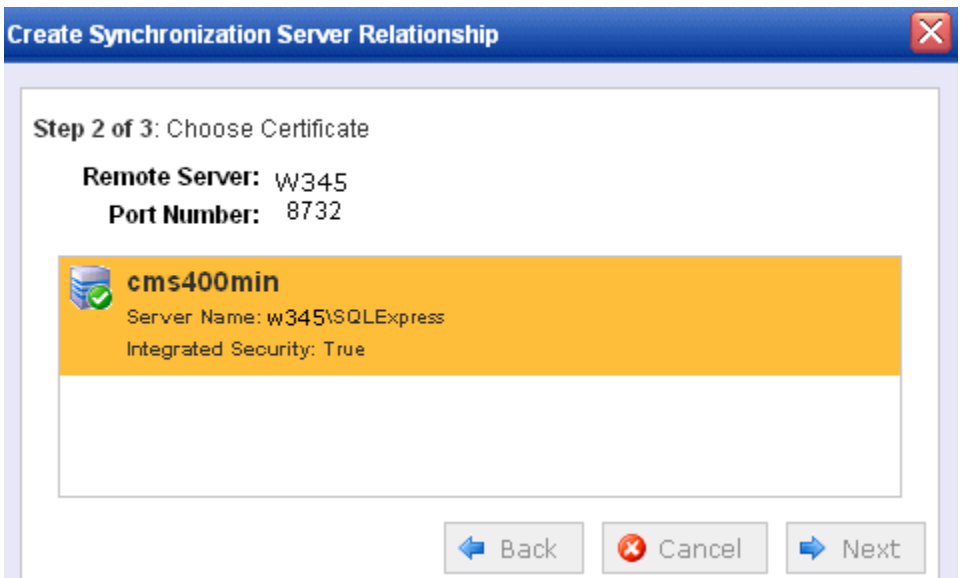
1. On the local server, sign on to **Ektron CMS400.NET**.
2. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Synchronization**.
3. The View All Synchronization Configurations screen appears.


View All Synchronization Configurations
There are no configurations. Please click the " " button above to begin creating a synchronization configuration.

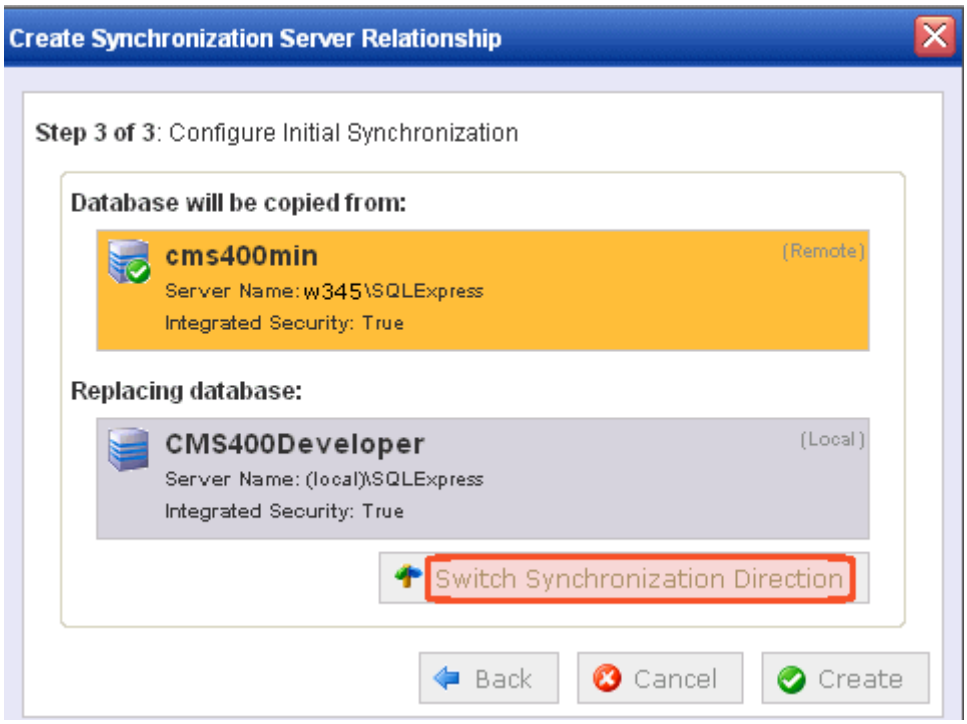
4. Click the **Add** button ( ).
5. The Create Synchronization Server Relationship screen appears.



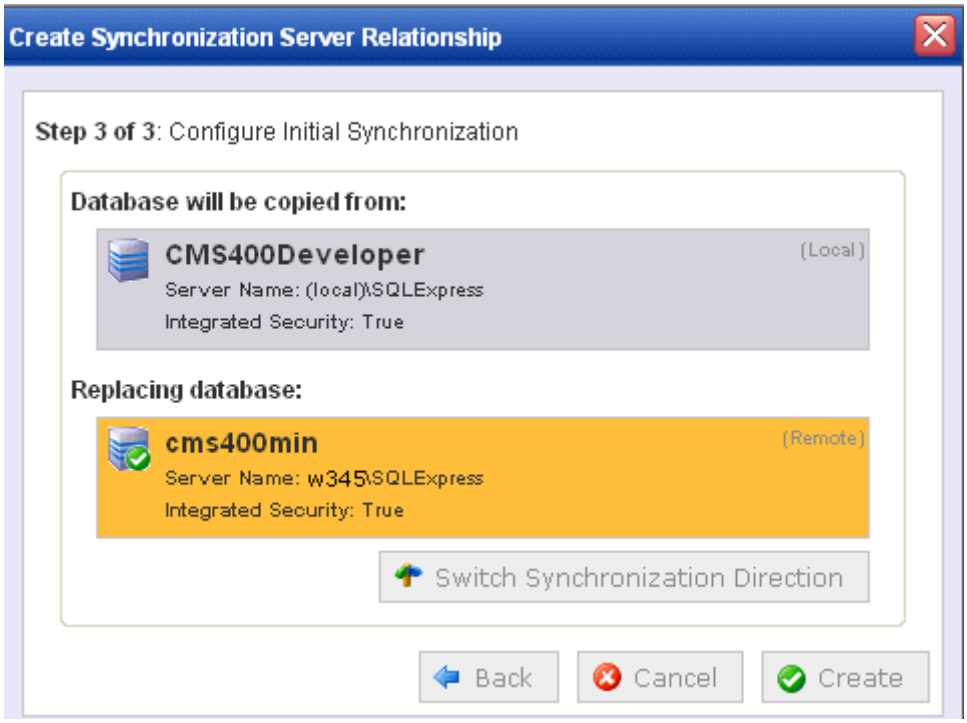
6. At the **Remote Server** field, enter the name of the remote server.
7. At the **Choose Certificate** field, the name of the remote server appears.
8. Click the **Connect** button. This action connects the local with the remote server.
9. After you connect to the remote server, a new screen appears showing its database.



10. Click **Next**.
11. A new screen appears, showing both servers.

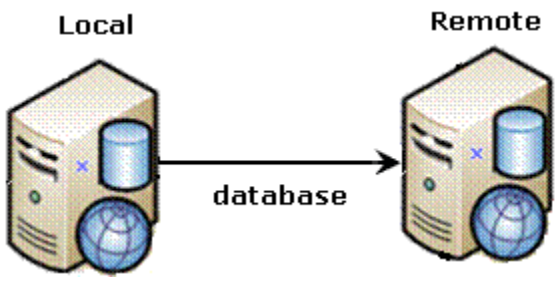


12. Click the **Switch Synchronization Direction** button.
13. Now the screen indicates that the database will be uploaded from your local server (which contains the CMS400 Developer site) to the new, remote server. See below.

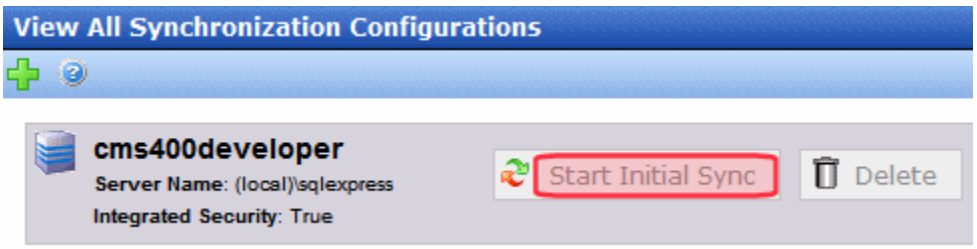


14. Click **Create**. This action connects the local and remote servers.

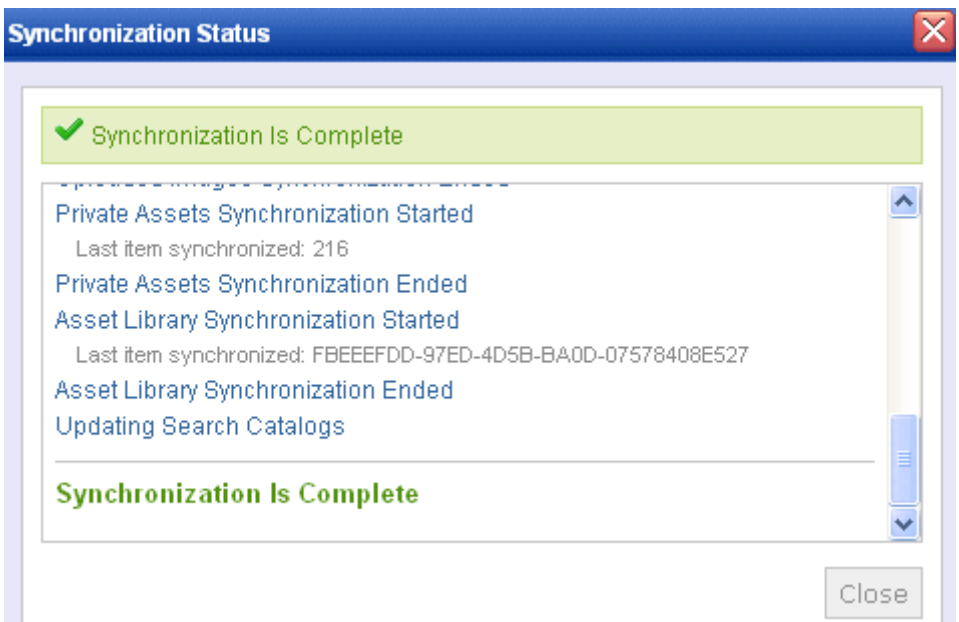
Part Four: Upload the Local Server's Database to the Remote Server



1. From the View All Synchronization Configurations screen, click the **Start Initial Sync** button.

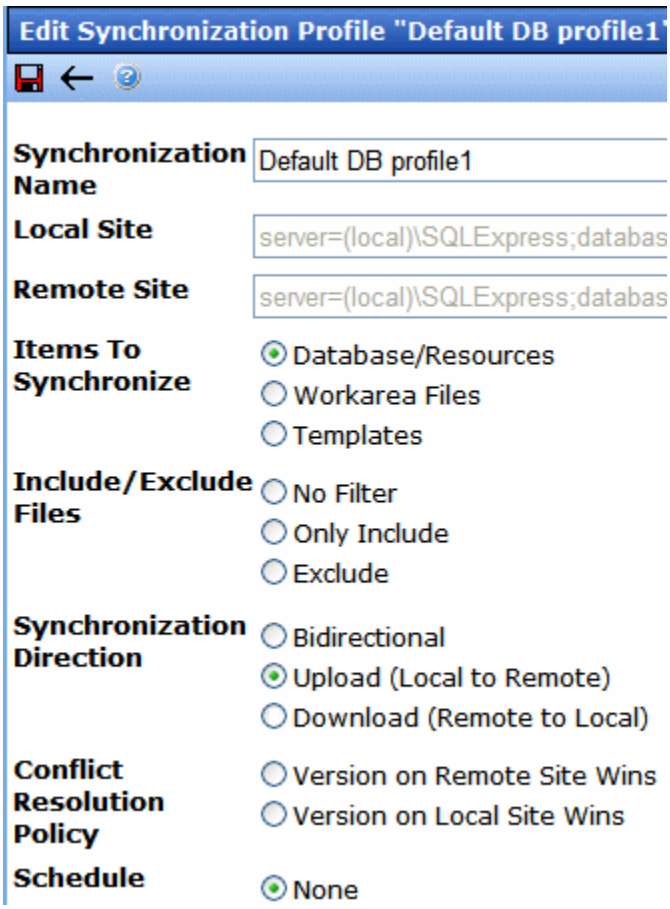


2. The initial sync uploads the local server's database to the remote server.
3. A screen tracks the progress.

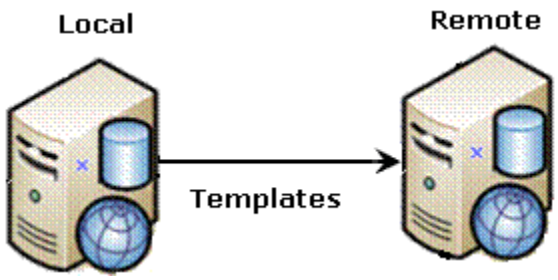


4. When the sync is finished, **Synchronization is Complete** appears.

The initial sync also creates a *default database profile*. The profile remembers information about the sync, such as source and destination databases, sync direction, and the fact that it syncs the database and resource files (see example below). You can reuse this profile to sync your database/resource files any time in the future.

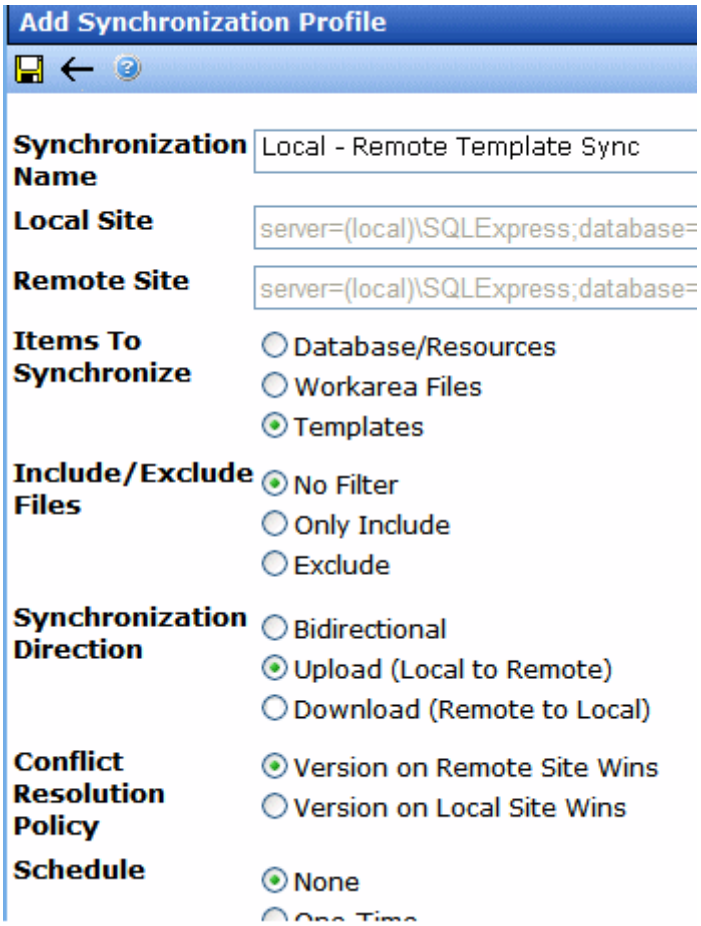


Part Five: Upload the Local Server's Templates to Remote

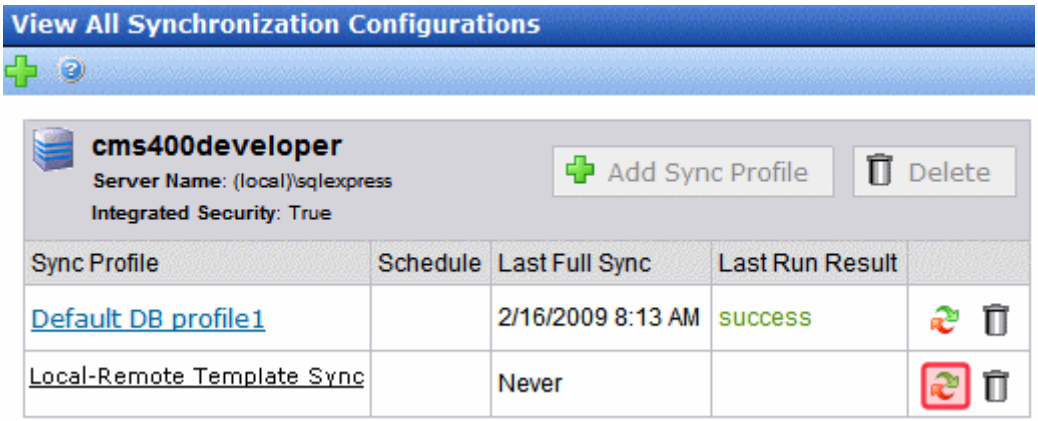


1. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button.
2. The Add Synchronization Profile screen appears.

3. At the **Synchronization name** field, give this profile a name, such as Local - Remote Template Sync.
4. At the **Items to Synchronize** field, select **Templates**.
5. For **Direction**, choose **Upload**.
6. For **Schedule**, choose **None**. (See example below.)



7. Save the profile.
8. Click the Run button to the right of the template sync (circled below).

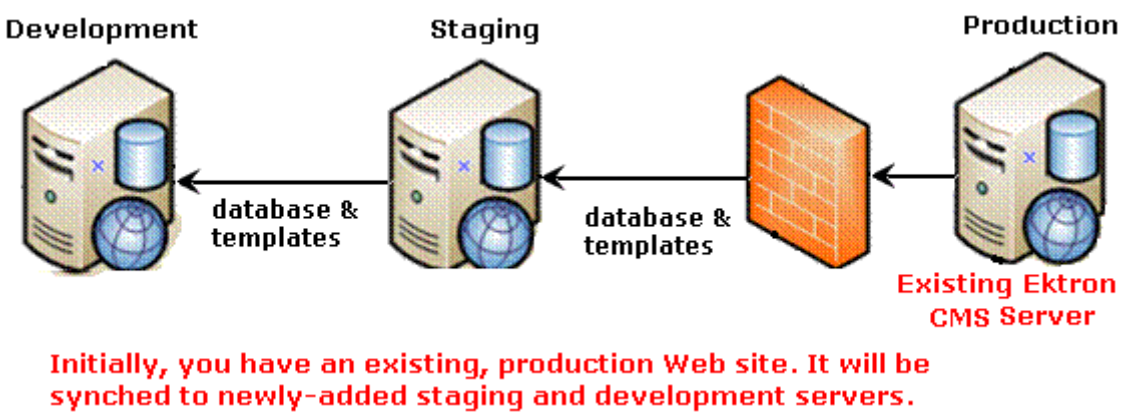


9. A screen tracks the sync's progress.
10. When the sync is complete, **Synchronization is Complete** appears.

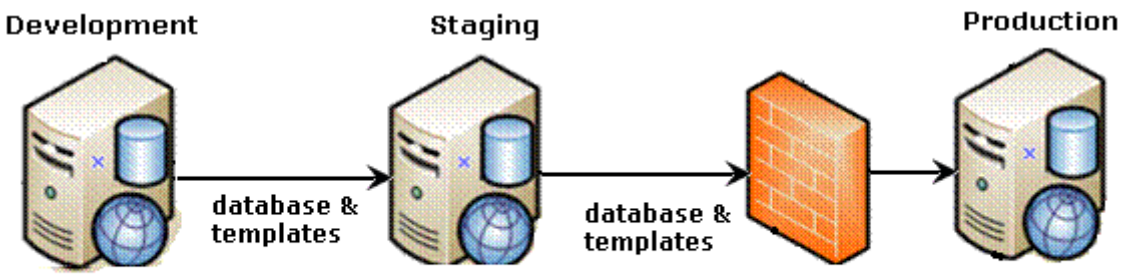
You can reuse the template sync profile to sync templates any time in the future.

Scenario 3: Setting up a Development > Staging > Production Environment

Before


Development
Staging
Production
database & templates
database & templates
Existing Ektron CMS Server
Initially, you have an existing, production Web site. It will be synched to newly-added staging and development servers.

After



When done, you will have the configuration shown above.
Developers can update files on the Development server, then sync them to the staging and production servers.

In this scenario, a version of **Ektron CMS400.NET** resides on one server. You will consider that your production server and use it to initialize the staging and development servers.

Here's a preview of the steps you will follow.

- "Part One: Set up a Min Site on the Staging and Development Servers" on page 1278
- "Part Two: Generate and Copy Security Certificates" on page 1278
- "Part Three: Connect Staging and Production Servers" on page 1288
- "Part Four: Download the Production Server's Database to the Staging Server" on page 1290
- "Part Five: Download the Production Server's Templates to Staging" on page 1293
- "Part Six: Connect the Development and Staging Servers" on page 1295
- "Part Seven: Download the Staging Server's Database to the Development Server" on page 1298
- "Part Eight: Download the Staging Server's Templates to Development" on page 1300

Prerequisites - See "eSync Requirements" on page 1303

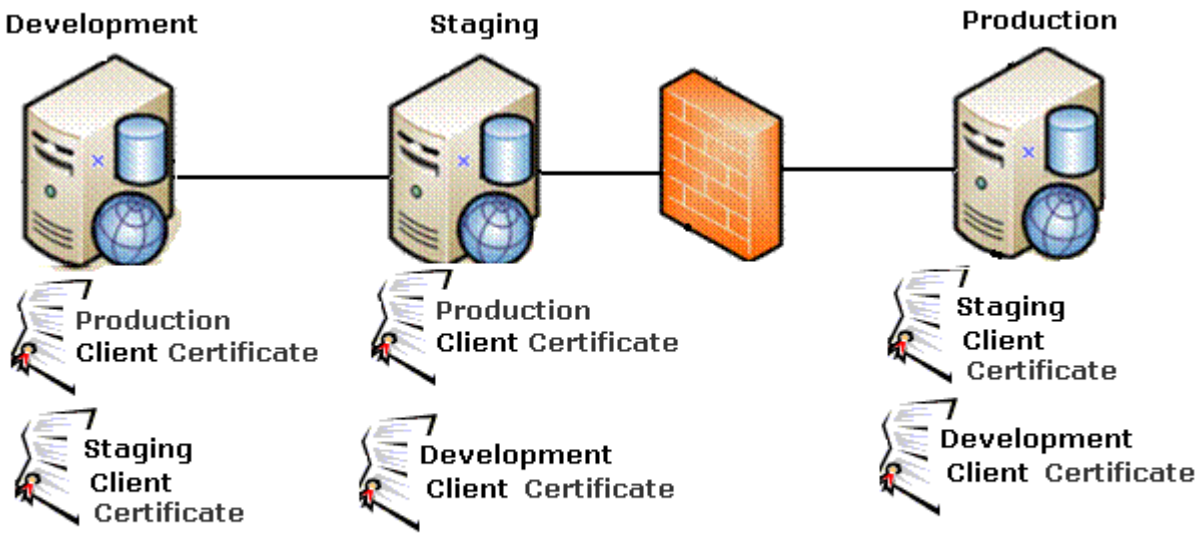
Part One: Set up a Min Site on the Staging and Development Servers

1. Upgrade your existing server to the current version of **Ektron CMS400.NET** if necessary.
2. Install a minimum site on the staging and development servers.

   To do this, run the **Ektron CMS400.NET** base installation file (CMS400Base7x.exe) version 7.6 or higher. (For more information, see the **Ektron CMS400.NET** Setup manual.)

Part Two: Generate and Copy Security Certificates

Security certificates authorize synchronization between servers. In an eSync configuration, every server needs a security certificate from every other server, as shown below.



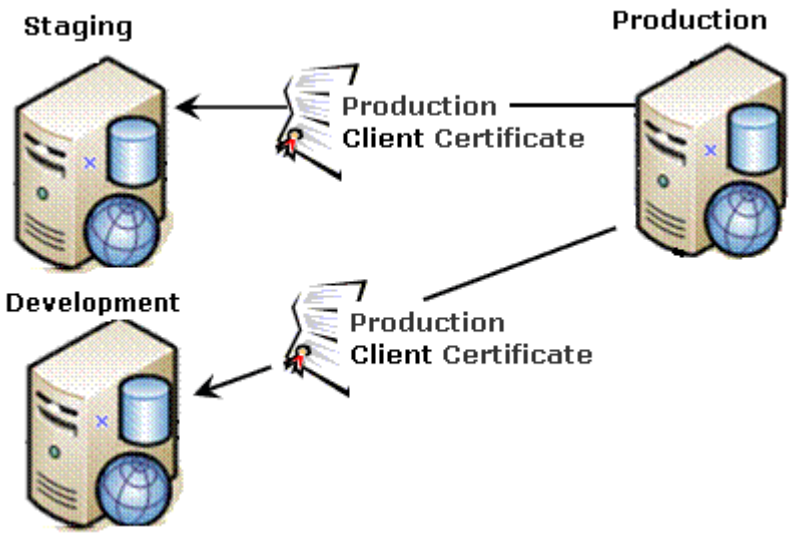
This configuration requires security certificates to be generated then copied to other servers.

To generate and copy these certificates, follow these steps.

- ”A. Generate Security Certificates on Production and Copy Them to Staging and Development” on page 1279
- ”B. Generate Security Certificates on Staging and Copy Them to Development and Production” on page 1282

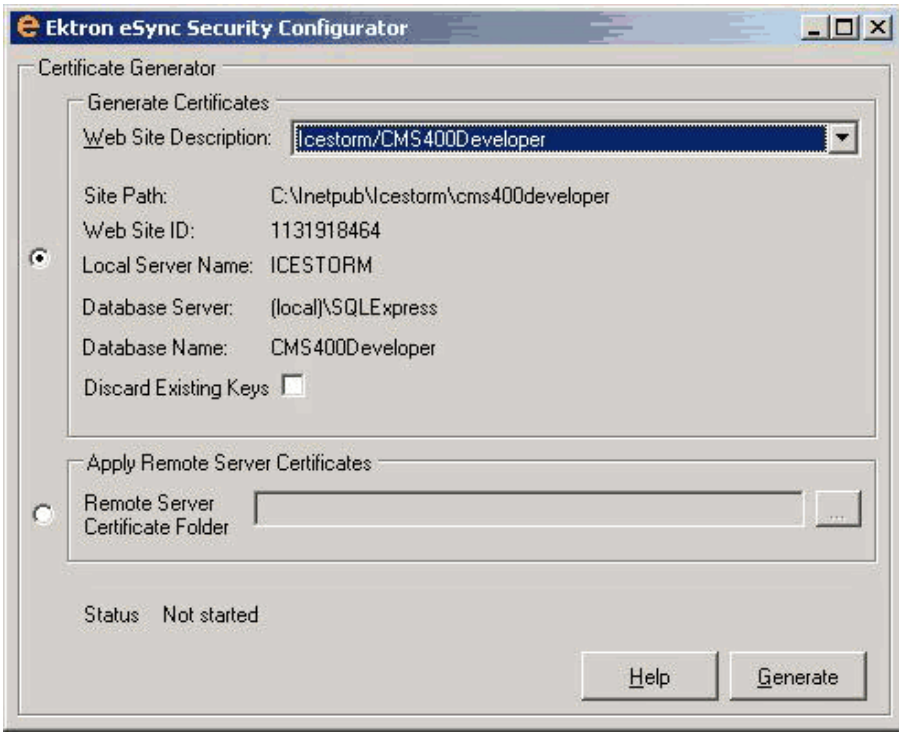
- "C. Generate Security Certificates on Development and Copy them to Staging and Production" on page 1285

A. Generate Security Certificates on Production and Copy Them to Staging and Development



Follow these steps to complete this procedure.

1. Sign on to the production server.
2. Click the **Windows Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
3. The following screen appears.



4. At the **Web Site Description** field, select the Web site on the production server.
5. Press **Generate**.
6. The certificates are created on the production server.
7. Open two Windows Explorer windows: one showing the production server's file system, and the other showing the staging server's file system.
8. In the staging server window, create a folder underneath the root folder. Name the folder **Prod security certificates**.

WARNING! Do not create the new folder under the web root, C:\inetpub\wwwroot.

9. In the production server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
10. From that folder, copy these files.

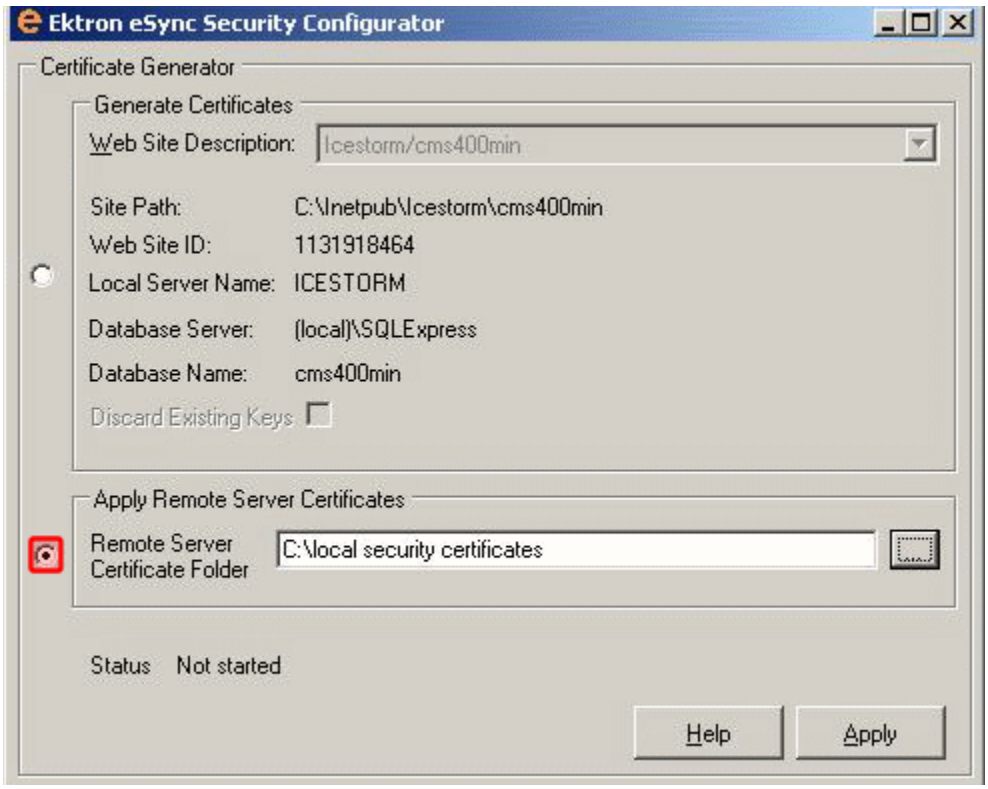
    •*servername*_SyncClient.pfx

    •*servername*_SyncClient.pvk

- *servername*_SyncClient.cer
- *servername*_SyncServer.pfx
- *servername*_SyncServer.pvk
- *servername*_SyncServer.cer

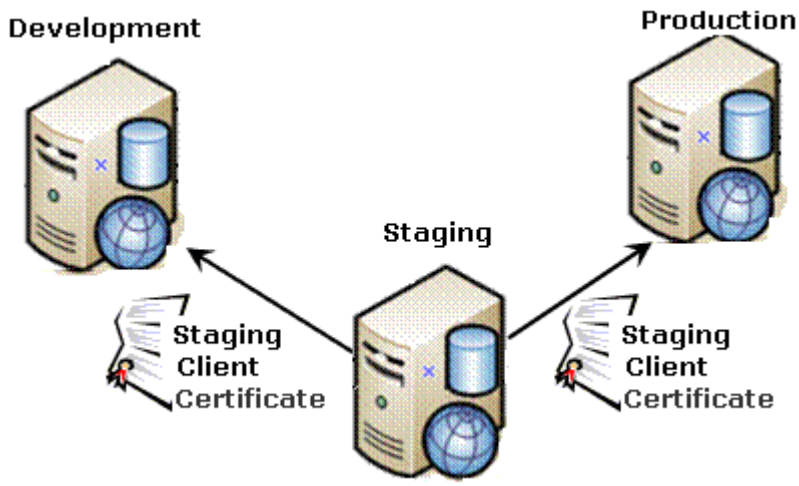
11. Paste the files into the folder you created in Step 9. Make sure there are no other security files in the folder.
12. Close both windows you opened in Step 8.

    After copying the security certificate files to the staging folder, you need to register and move them to the correct folders. The Security Configurator screen does this.
13. Sign on to the staging server.
14. Open the security configurator screen using this path: **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
15. The security configurator screen appears.



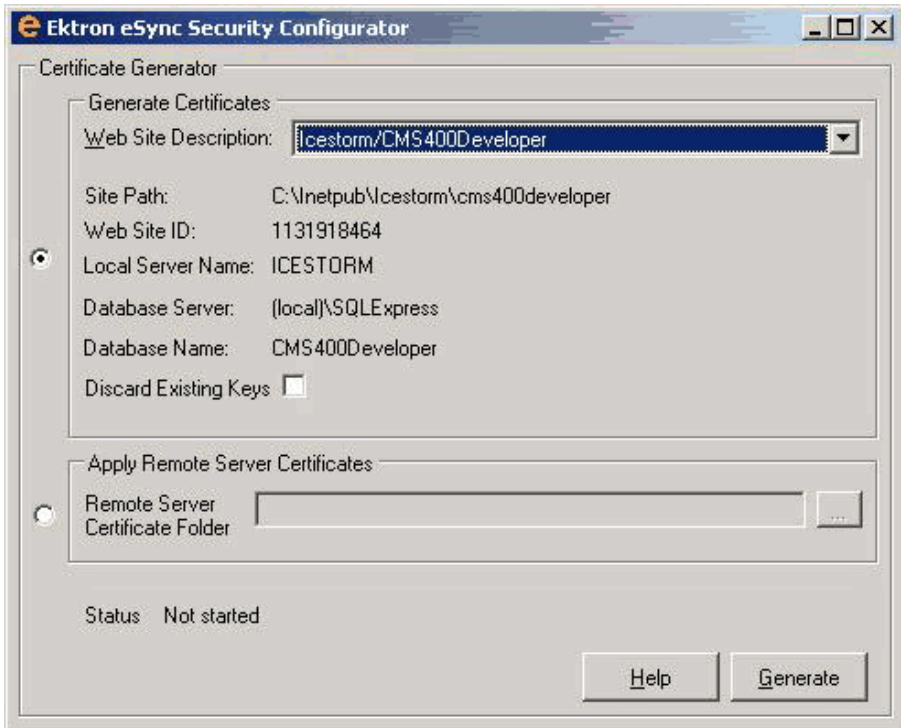
16. Click the **Apply Remote Server Certificates** button (circled above).
17. Click the browse button next to that field.
18. Browse to the folder to which you pasted the security certificates in Step 12.
19. Click the **Apply** button.
20. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the staging server.
21. Follow the same procedure to move production certificates to the development server. To do this, begin at Step 8 and follow all steps. Wherever the instructions mention a staging server, substitute the development server.

B. Generate Security Certificates on Staging and Copy Them to Development and Production



Follow these steps to complete this procedure.

1. Sign on to the staging server.
2. Click the **Windows Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
3. The following screen appears.



4. At the **Web Site Description** field, select the Web site on the staging server.
5. Press **Generate**.
6. The certificates are created on the staging server.
7. Open two Windows Explorer windows: one showing the staging server's file system, and the other showing the production server's file system.
8. In the production server window, create a folder underneath the root folder. Name the folder **staging security certificates**.

WARNING! Do not create the new folder under the web root, C:\inetpub\wwwroot.

9. In the staging server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
10. From that folder, copy these files.

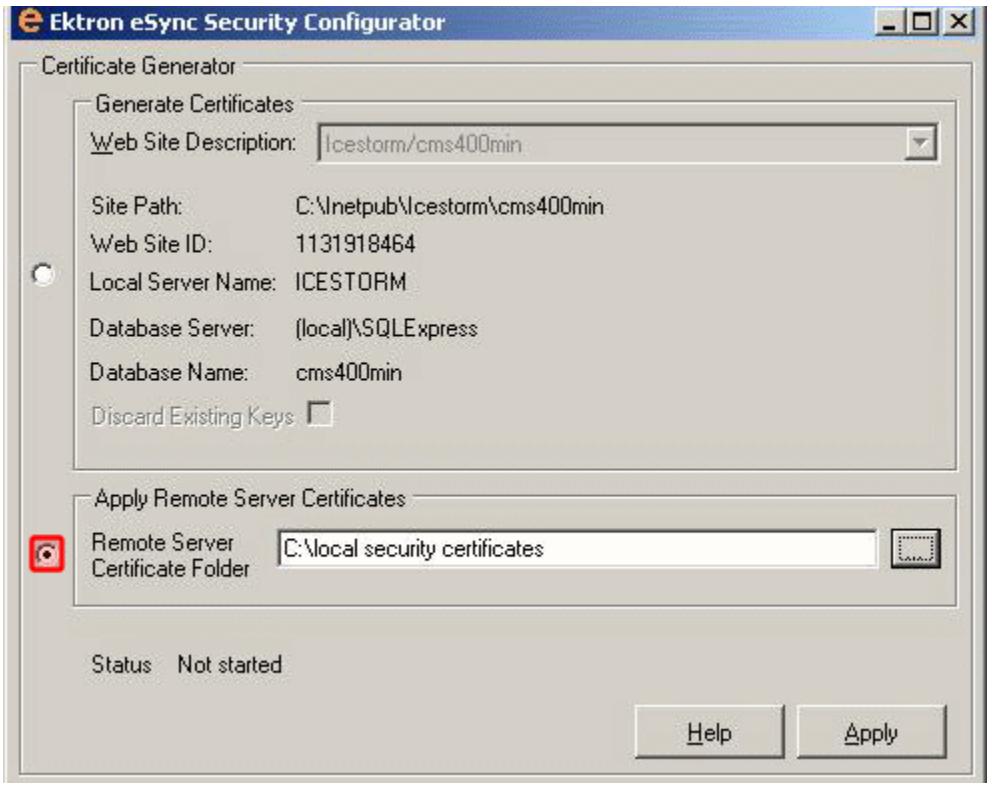
    •*servername*_SyncClient.pfx

    •*servername*_SyncClient.pvk

- *servername*_SyncClient.cer
- *servername*_SyncServer.pfx
- *servername*_SyncServer.pvk
- *servername*_SyncServer.cer

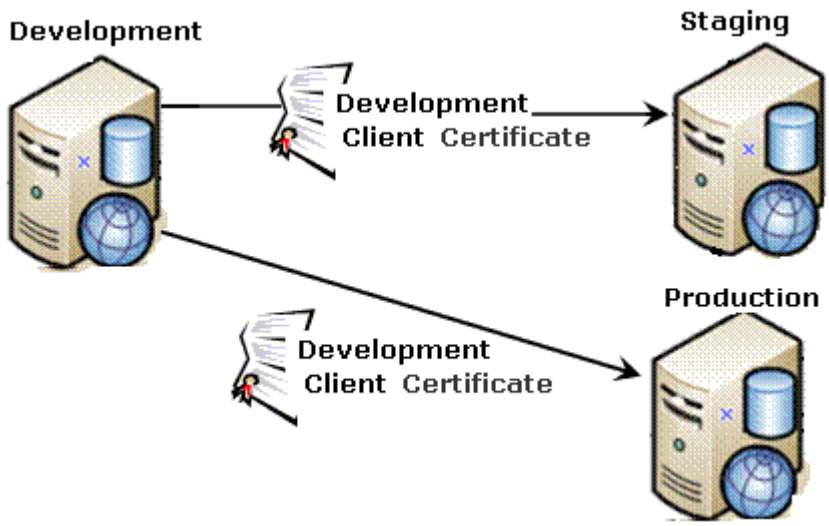
11. Paste the files into the folder you created in Step 9. Make sure there are no other security files in the folder.
12. Close both windows you opened in Step 8.

    After copying the security certificate files to the production folder, you need to register and move them to the correct folders. The Security Configurator screen does this.
13. Sign on to the production server.
14. Open the security configurator screen using this path: **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
15. The security configurator screen appears.

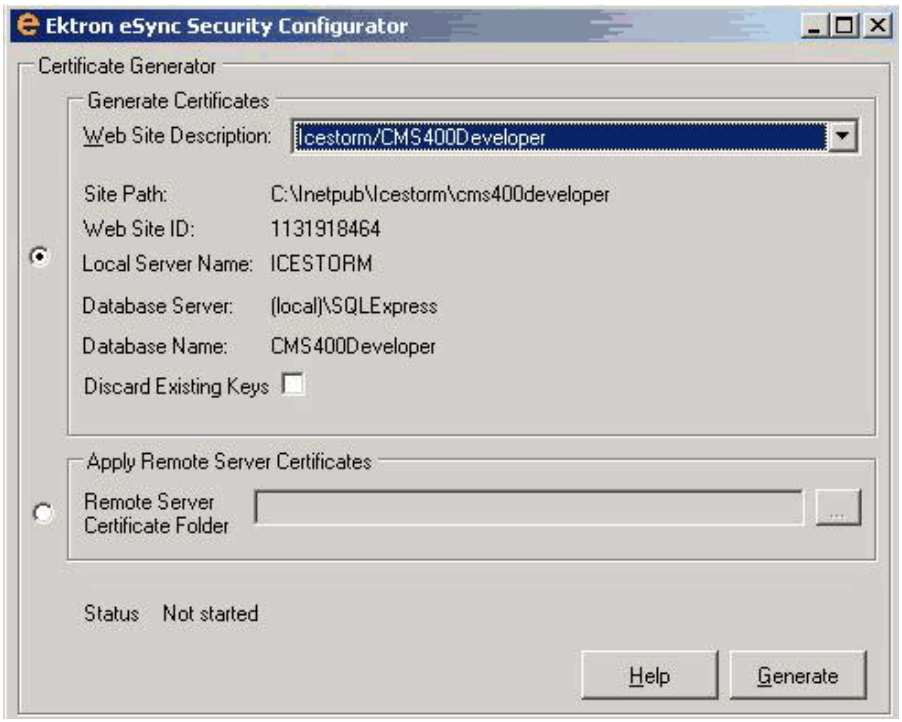


16. Click the **Apply Remote Server Certificates** button (circled above).
17. Click the browse button next to that field.
18. Browse to the folder to which you pasted the security certificates in Step 12.
19. Click the **Apply** button.
20. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the production server.
21. Follow the same procedure to move staging certificates to the development server. To do this, begin at Step 8 and follow all steps. Wherever the instructions mention a production server, substitute the development server.

C. Generate Security Certificates on Development and Copy them to Staging and Production



1. Sign on to the development server.
2. Click the **Windows Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
3. The following screen appears.



4. At the **Web Site Description** field, select the Web site on the development server.
5. Press **Generate**.
6. The certificates are created on the development server.
7. Open two Windows Explorer windows: one showing the development server's file system, and the other showing the staging server's file system.
8. In the staging server window, create a folder underneath the root folder. Name the folder **Dev security certificates**.

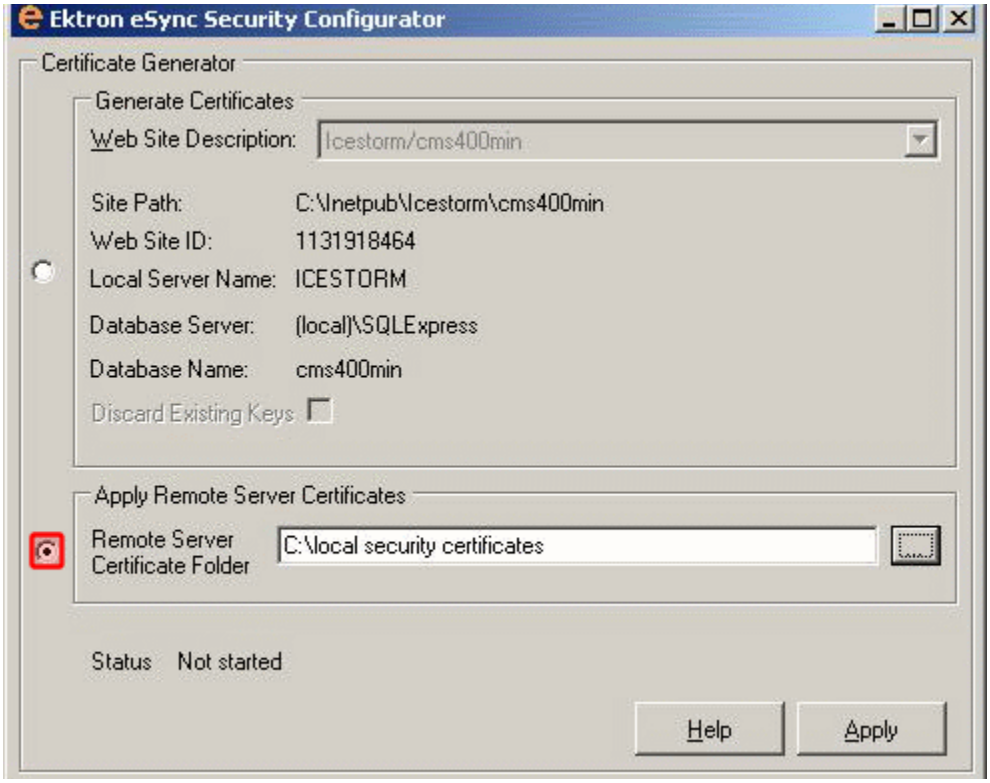
WARNING! Do not create the new folder under the web root, C:\inetpub\wwwroot.

9. In the development server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
10. From that folder, copy these files.
    - *servername*_SyncClient.pfx
    - *servername*_SyncClient.pvk
    - *servername*_SyncClient.cer

- *servername*_SyncServer.pfx
- *servername*_SyncServer.pvk
- *servername*_SyncServer.cer

11. Paste the files into the staging server folder you created in Step 9. Make sure there are no other security files in the folder.
12. Close both windows you opened in Step 8.

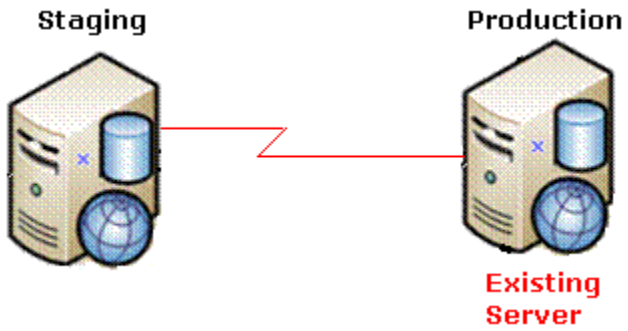
    After copying the security certificate files to the staging folder, you need to register and move them to the correct folders. The Security Configurator screen does this.
13. Sign on to the staging server.
14. Open the security configurator screen using this path: **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
15. The security configurator screen appears.



16. Click the **Apply Remote Server Certificates** button (circled above).

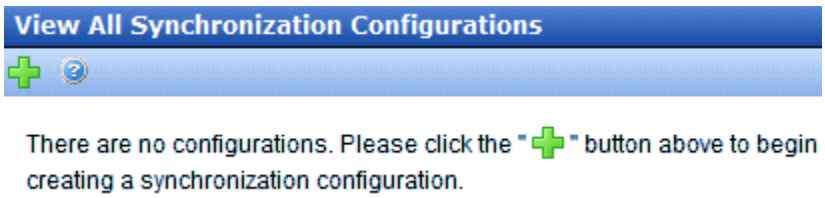
17. Click the browse button next to that field.
18. Browse to the folder you created in Step 9.
19. Click the **Apply** button.
20. The security configurator copies the certificates you pasted in Step 12 to the correct folder, and configures them for the staging server.
21. Follow the same procedure to move development certificates to the production server. To do this, begin at Step 8 and follow all steps. Wherever the instructions mention a staging server, substitute the production server.

Part Three: Connect Staging and Production Servers



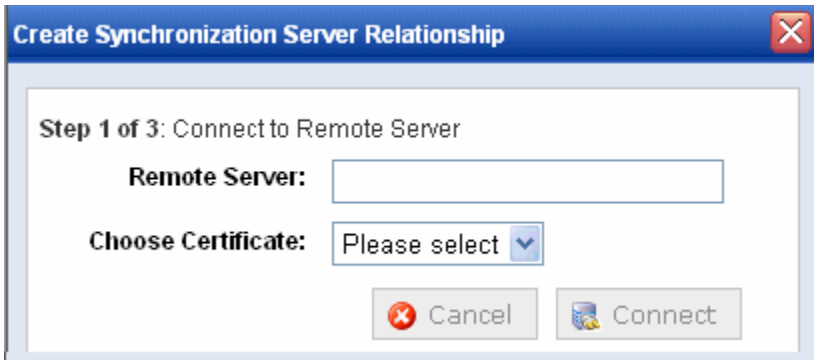
WARNING! Back up your database before beginning this procedure!

1. On the staging server, sign on to **Ektron CMS400.NET**.
2. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Synchronization**.
3. The View All Synchronization Configurations screen appears.

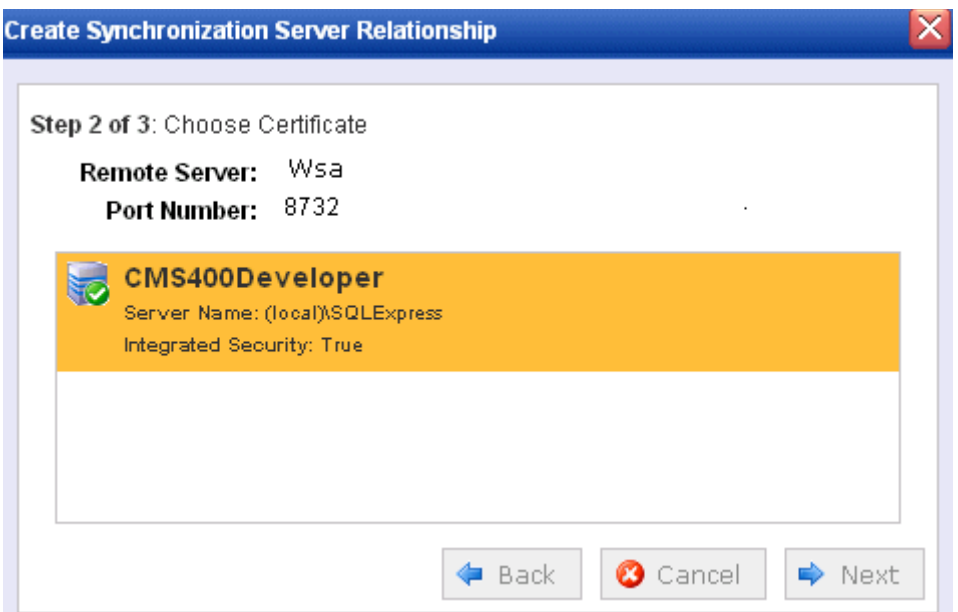

View All Synchronization Configurations
There are no configurations. Please click the " " button above to begin creating a synchronization configuration.

4. Click the **Add** button ( ).

5. The Create Synchronization Server Relationship screen appears.

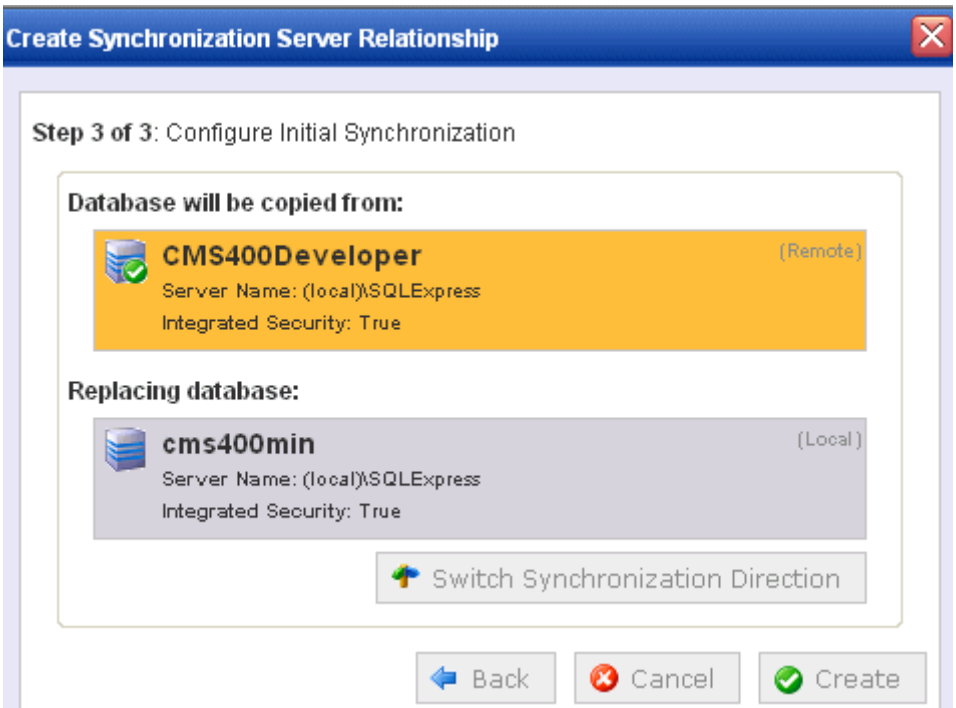


6. At the **Remote Server** field, enter the name of the production server.
7. At the **Choose Certificate** field, the name of the production server appears.
8. Click the **Connect** button. This action connects the staging with the production server.
9. After you connect to the production server, a new screen appears showing its database.



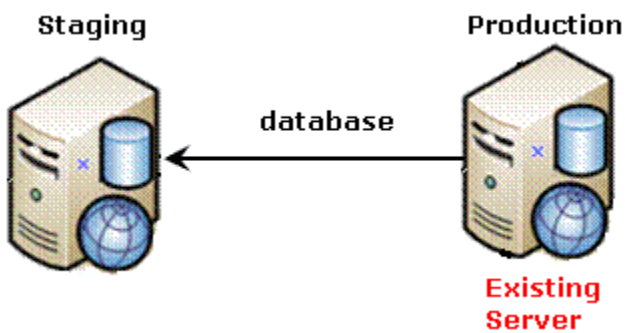
10. Click **Next**.

11. A new screen appears, showing both servers.

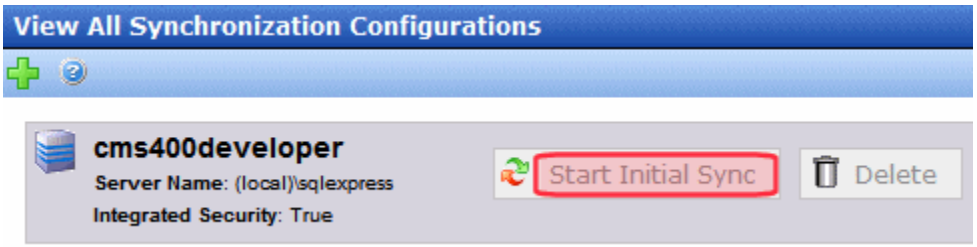


12. Click **Create**. This action connects the staging and production servers.

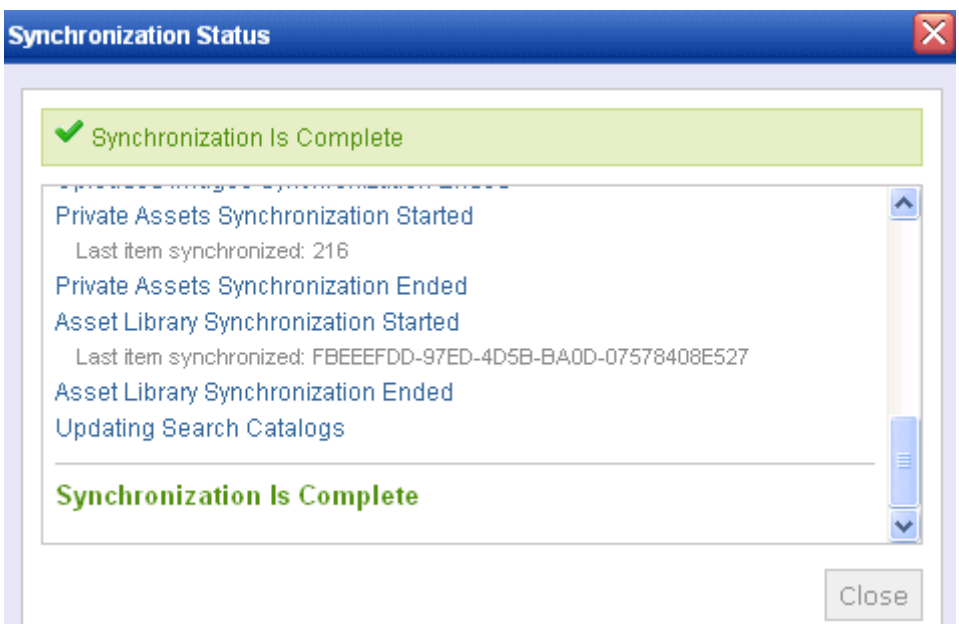
Part Four: Download the Production Server's Database to the Staging Server



1. From the View All Synchronization Configurations screen, click the **Start Initial Sync** button.



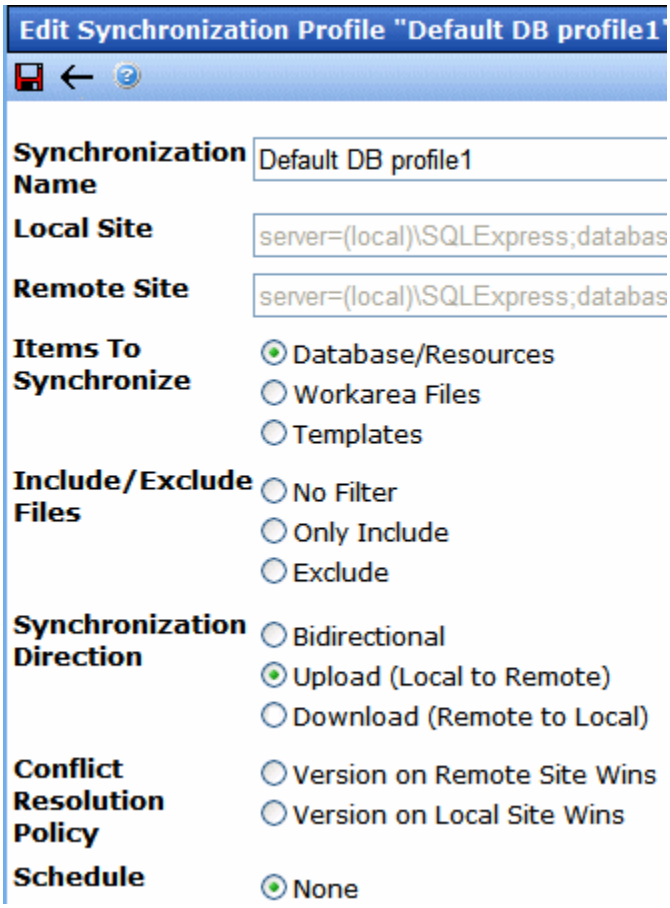
2. The initial sync downloads the production server's database to the staging server.
3. A screen tracks the sync's progress.



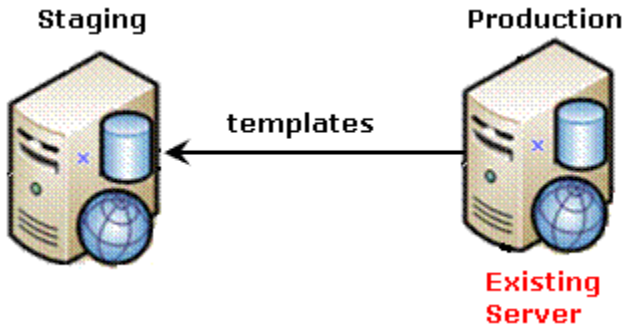
4. When the sync is complete, **Synchronization is Complete** appears.

The initial sync also creates a *default database profile*. The profile remembers information about the sync, such as the source and destination databases, sync direction, and the fact that it syncs the

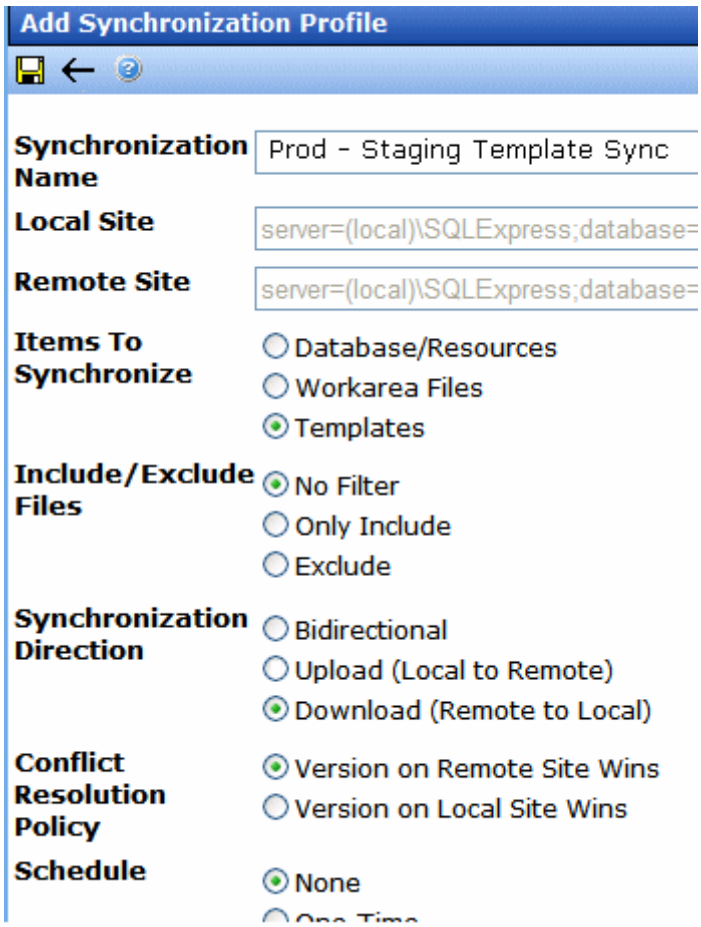
database and resource files (see example below). You can reuse this profile to run database/resource syncs any time in the future.



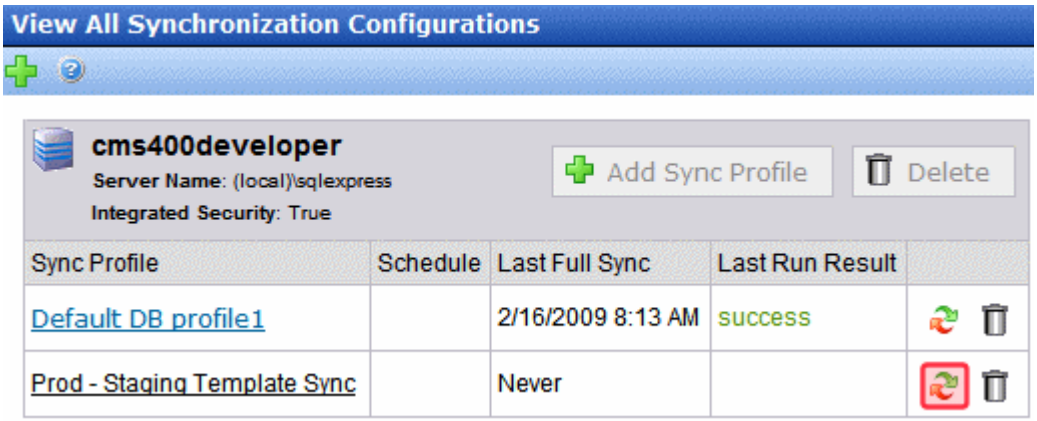
Part Five: Download the Production Server's Templates to Staging



1. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button.
2. The Add Synchronization Profile screen appears.
3. At the **Synchronization name** field, give this profile a name, such as Prod - Staging Template Sync.
4. At the **Items to Synchronize** field, select **Templates**.
5. For **Direction**, choose **Download**.
6. For **Schedule**, choose **None**. (See example below.)



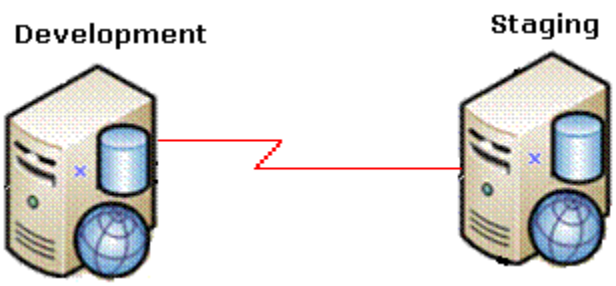
7. Save the profile.
8. Click the Run button to the right of the template sync (circled below).



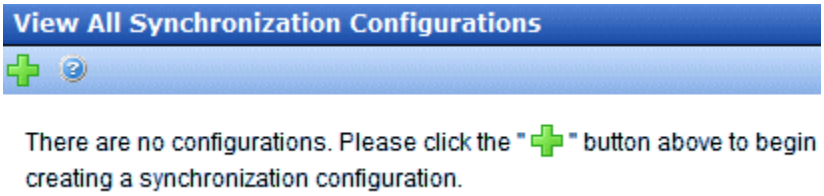
9. A screen tracks the sync's progress.
10. When the sync is complete, **Synchronization is Complete** appears.

You can reuse the template sync profile to sync templates any time in the future.

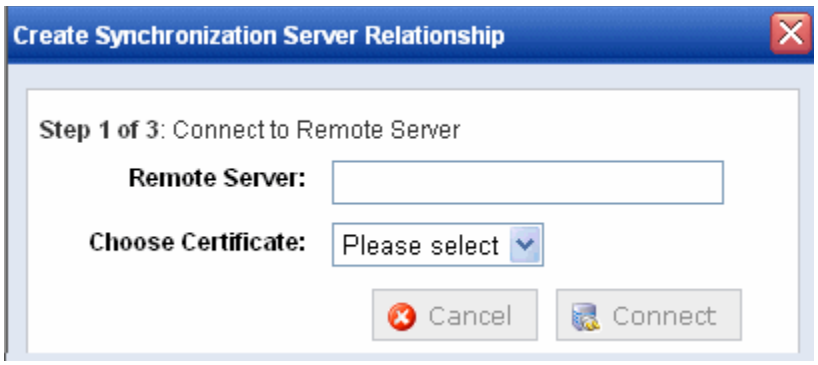
Part Six: Connect the Development and Staging Servers



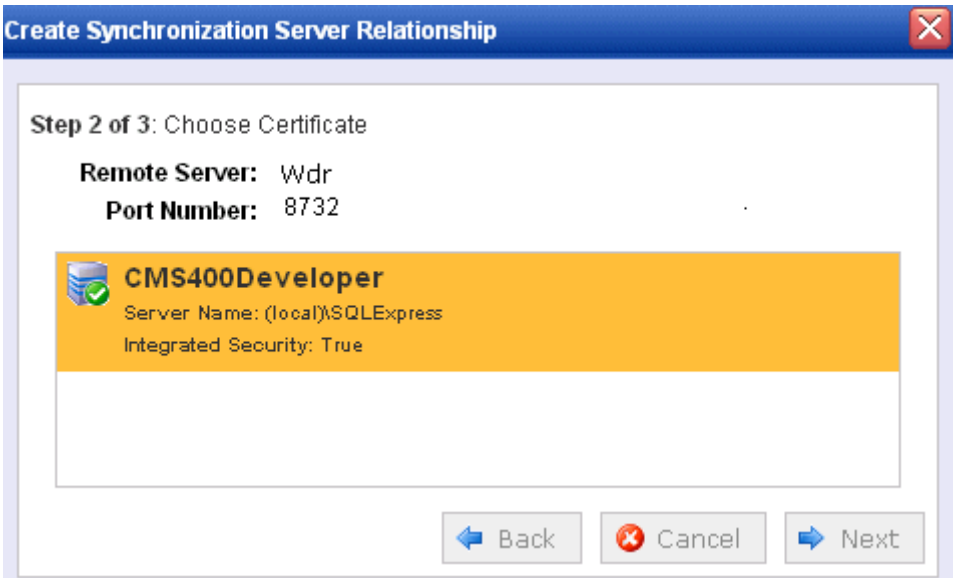
1. Sign on to **Ektron CMS400.NET** development server.
2. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Synchronization**.
3. The View All Synchronization Configurations screen appears.


View All Synchronization Configurations
There are no configurations. Please click the " " button above to begin creating a synchronization configuration.

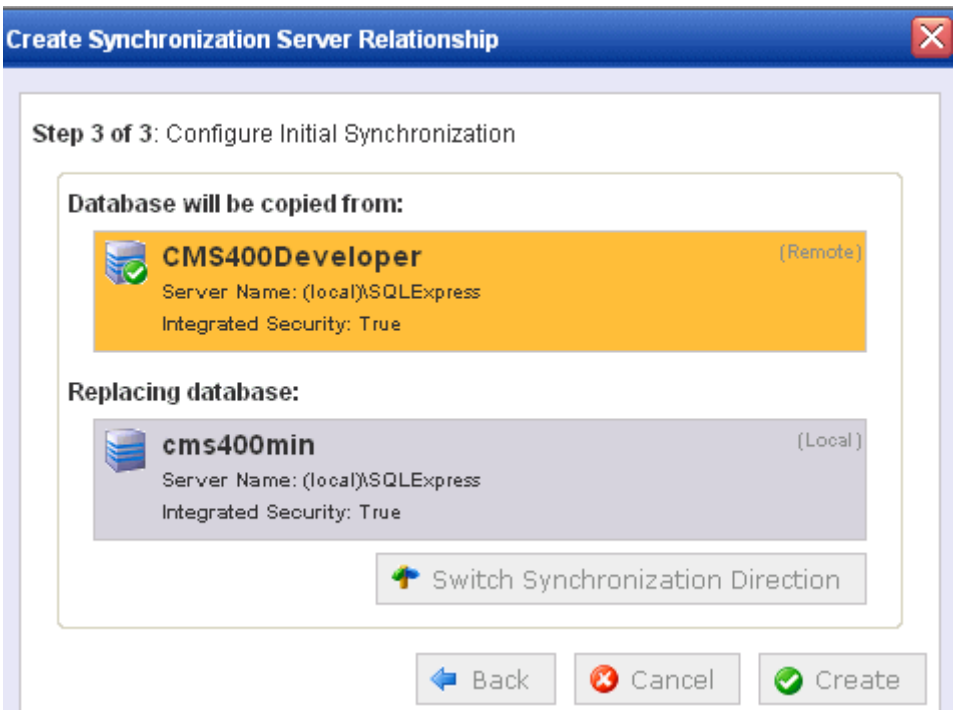
4. Click the **Add** button ( ).
5. The Create Synchronization Server Relationship screen appears.



6. At the **Remote Server** field, enter the name of the staging server.
7. At the **Choose Certificate** field, the name of the staging server appears.
8. Click the **Connect** button. This action connects the development with the staging server.
9. After you connect to the staging server, a new screen appears showing its database.

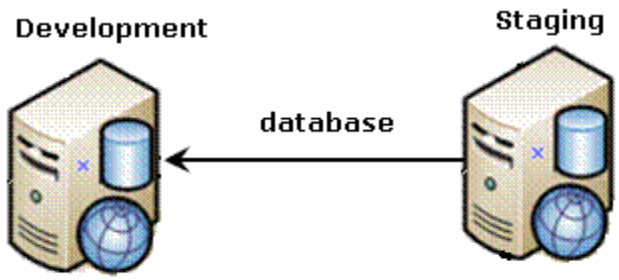


10. Click **Next**.
11. A new screen appears, showing both servers.

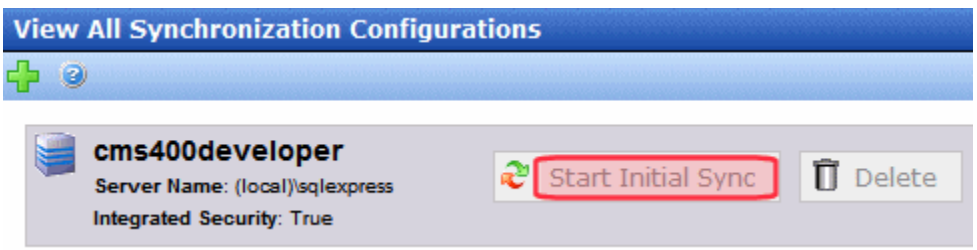


12. Click **Create**. This action connects the development and staging servers.

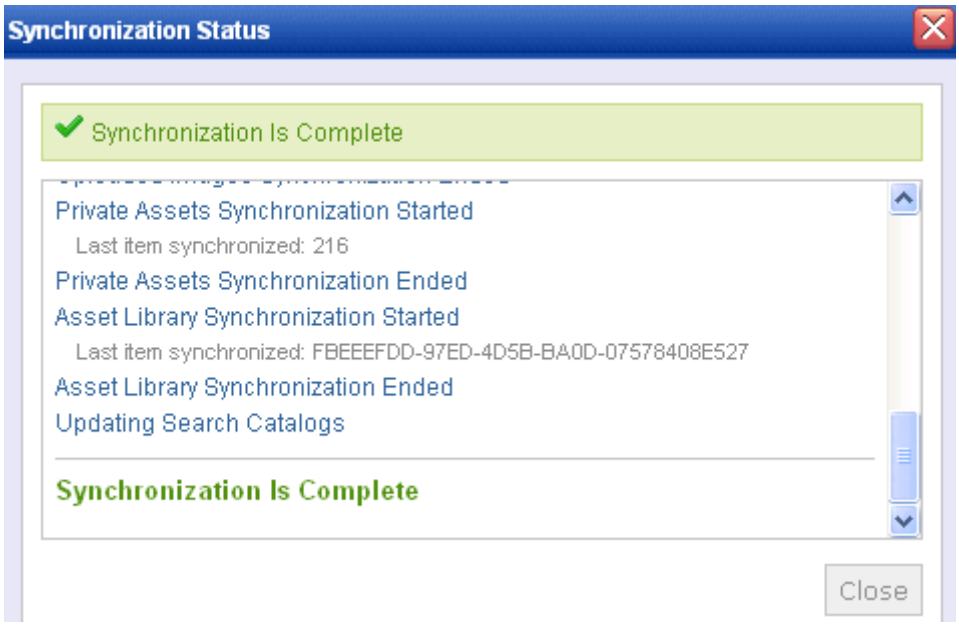
Part Seven: Download the Staging Server's Database to the Development Server



1. From the View All Synchronization Configurations screen, click the **Start Initial Sync** button.

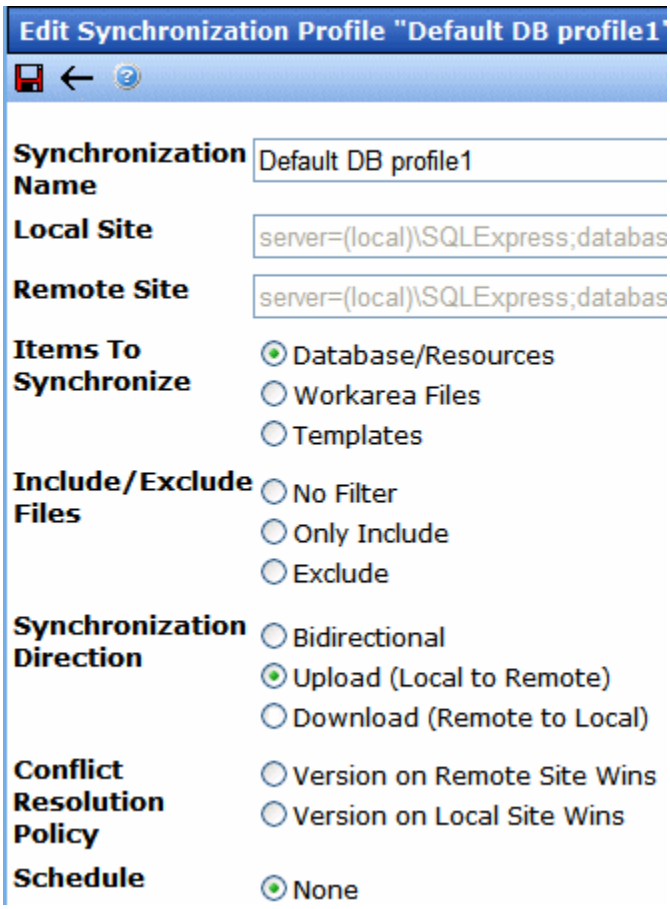


2. The initial sync downloads the staging server's database to the development server.
3. A screen tracks the sync's progress.

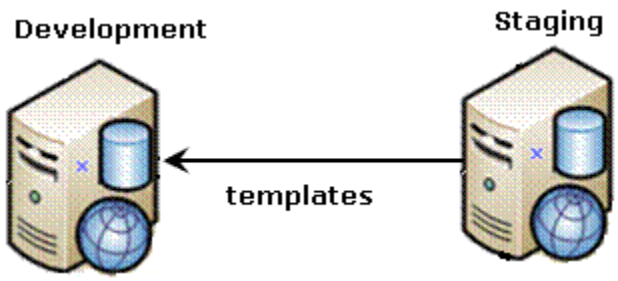


4. When the sync is complete, **Synchronization is Complete** appears.

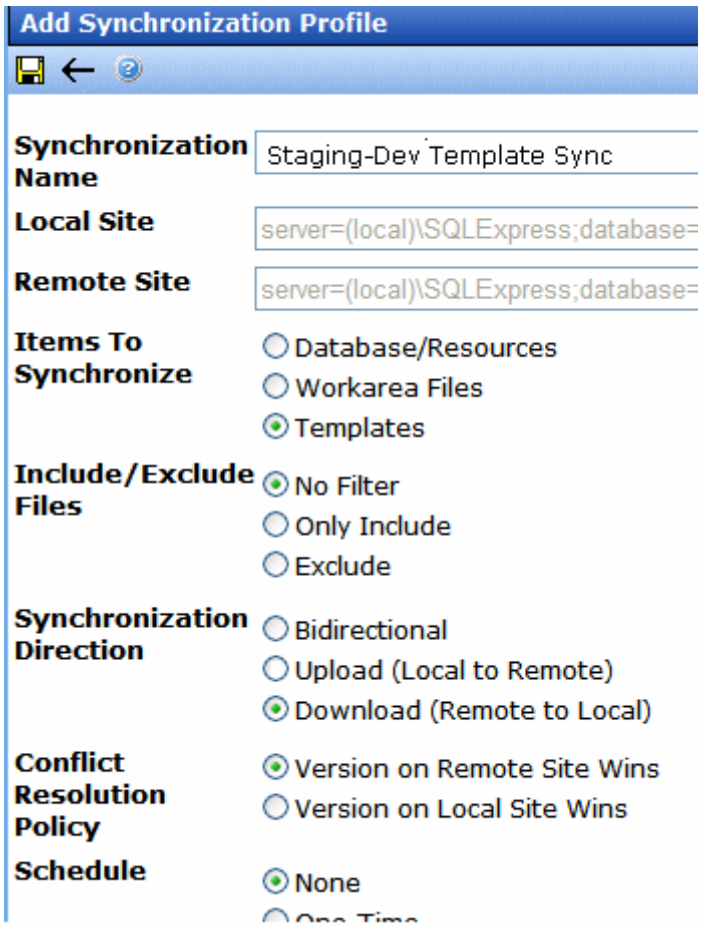
The initial sync also creates a *default database profile*. The profile remembers information about the sync, such as the source and destination databases, sync direction, and the fact that it syncs the database and resource files (see example below). You can reuse this profile to sync the database/resources between these two servers at any time in the future.



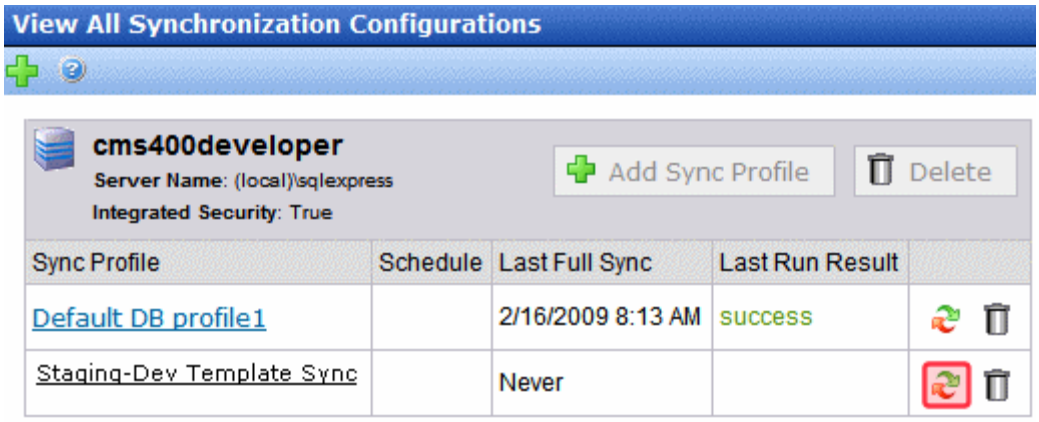
Part Eight: Download the Staging Server's Templates to Development



1. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button.
2. The Add Synchronization Profile screen appears.
3. At the **Synchronization name** field, give this profile a name, such as Staging-Dev Template Sync.
4. At the **Items to Synchronize** field, select **Templates**.
5. For **Direction**, choose **Download**.
6. For **Schedule**, choose **None**. (See example below.)



7. Save the screen.
8. Click the Run button to the right of the template sync (circled below).



9. A screen tracks the sync's progress.
10. When the sync is complete, **Synchronization is Complete** appears.

You can reuse the template sync profile to sync templates any time in the future.

Using eSync

This section explains the following eSync topics.

- ”eSync Requirements” on page 1303
- ”Characteristics of eSync” on page 1304
- ”Managing eSync Security Certificates” on page 1313
- ”Using eSync to Initialize a New Site” on page 1324
- ”Setting up eSync Profiles” on page 1325
- ”Optional Steps before Running a Sync” on page 1339
- ”Running a Sync” on page 1339
- ”Backing up the Destination Server During an eSync” on page 1343
- ”Synching Custom Database Tables” on page 1347
- ”Reviewing Resolved Collisions” on page 1345
- ”Content and Folder Sync Options” on page 1348
- ”eSync in a Load Balanced Environment” on page 1355
- ”Using eSync in a Multi-site Environment” on page 1364
- ”Using eSync with Web Alerts” on page 1369
- ”eSync and Integrated Search Folders” on page 1369
- ”Using eSync with eCommerce” on page 1370
- ”eSync Troubleshooting” on page 1371

eSync Requirements

Ektron Software and Files

- **Ektron CMS400.NET** version 7.6 or higher

WARNING! The version of **Ektron CMS400.NET** on every server in the sync configuration must match. You cannot upgrade nor downgrade **Ektron CMS400.NET** using eSync.

- An **Ektron CMS400.NET** base installation file (for example, cms400Base7*x*.exe). Use this file to install a second site with which you will sync your current site.
- **Ektron CMS400.NET** licenses that support Enterprise or Professional with eSync on every server being synched.
- Matching security certificates on every server being synched. *See Also:* "Managing eSync Security Certificates" on page 1313

Microsoft Software

- Windows Server 2003 or higher; Vista Ultimate or Business
- Microsoft .NET Framework 3.5

  Ektron CMS400.NET's installation checks for this version of the framework during installation/upgrade. If it's not on your server, you are asked for permission to install it.

NOTE It is not a problem if your templates were created using the 2.0 Framework.

- Microsoft SQL 2005 SP2 or higher

User Permissions

- You are a member of the Administrators group or assigned the Synchronization Admin role. *See Also:* "Defining Roles" on page 795
- The user performing the sync has either a db_ddladmin or dbowner role for the SQL database

Server

The GMT time on each server's clock must be within 5 minutes of each other.

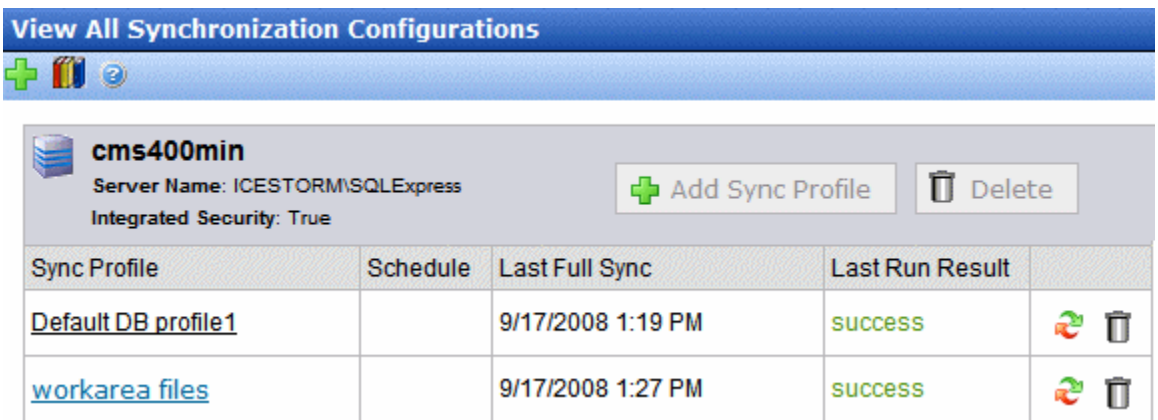
Characteristics of eSync

- "Easy and Flexible Setup and Usage" on page 1305
- "Sync Configurations" on page 1306

- "Unique ID Numbering" on page 1311
- "eSync Moves Changes Only" on page 1312

Easy and Flexible Setup and Usage

You administer eSync through **Ektron CMS400.NET**'s **Workarea > Settings > Configuration > Synchronization** screens. The screens let you establish a sync *configuration* between two databases, then specify any number of sync *profiles* for each configuration.



Each profile lets you specify data to sync, a direction, and a schedule. You can always sync immediately by clicking the sync ( ) button.

You create profiles to sync these kinds of data.

- all content, assets, and library assets
- all Workarea folder files
- the remaining site files (with a few exceptions)
- a selection of Windows files in your site root folder and its subfolders

See Also: "Setting up eSync Profiles" on page 1325

Individual file types can be included or excluded from the sync. In addition, you can sync **Ektron CMS400.NET** content or folders. *See Also:* "Content and Folder Sync Options" on page 1348

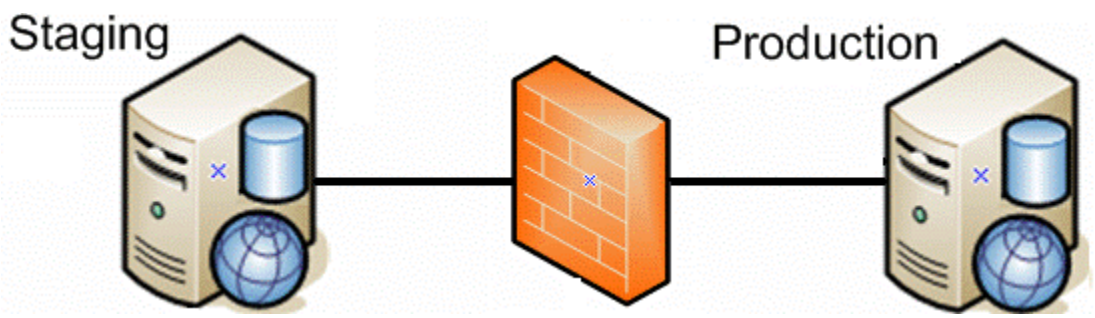
Sync Configurations

Several eSync configurations are shown below. You can synchronize any server to or from any other server with one important exception: *you cannot initiate a sync from a server outside the firewall*. You can only initiate a sync from a server inside the firewall and copy to a server outside the firewall. This is because the outside server does not know the address of servers inside the firewall. However, you can use a staging server to push and pull updated information to and from a production server.

IMPORTANT! All eSync transmissions use port 8732. This is not configurable.

Configuration 1: One Staging Server, One Production Server

This is the most basic eSync configuration, showing one staging and one production server. Each server has a database and one site.

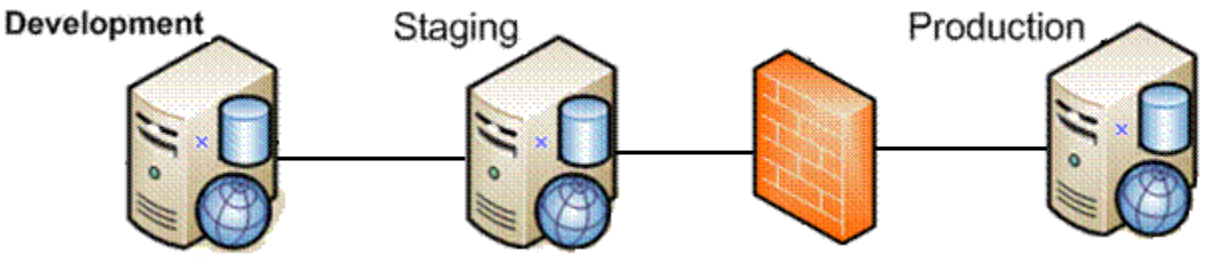


The eSync feature can automatically create a production server from your staging server. *See Also:* "Using eSync to Initialize a New Site" on page 1324

For installation instructions for this configuration, see "Scenario 2: Synching an Ektron CMS400.NET Server with Another Server" on page 1264.

Configuration 2: One Development Server, One Staging Server, One Production Server

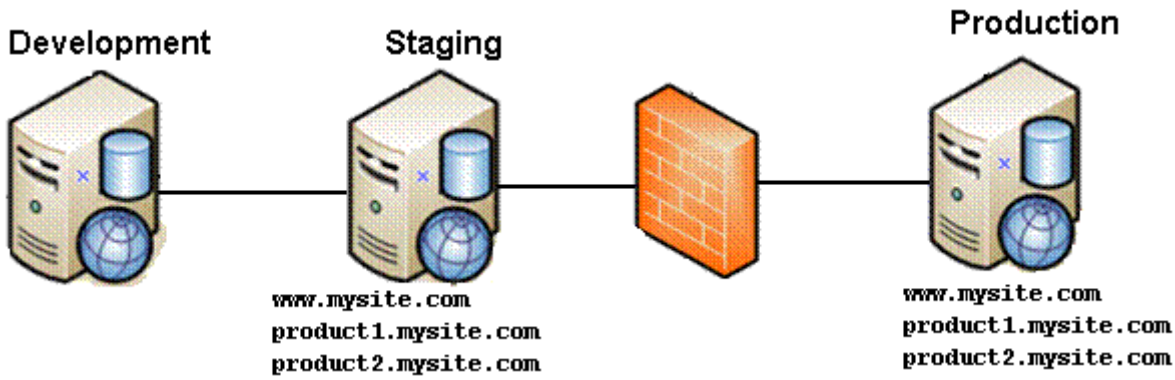
This configuration includes a development server. Developers can use it to create new features and modify existing ones. When they are done, they can sync the changes to the staging server, where the changes can be verified before being moved to production.



For installation instructions for this configuration, see "Scenario 3: Setting up a Development > Staging > Production Environment" on page 1276.

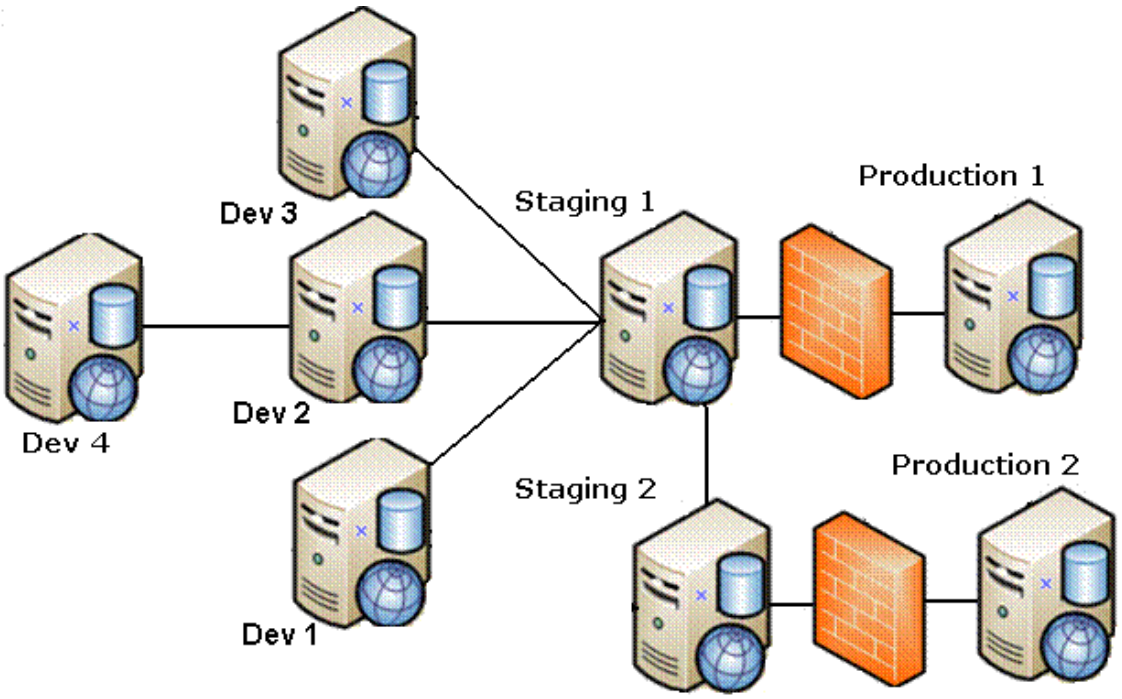
Configuration 2a: Multi-site Staging Server, Multi-site Production Server

The following configuration illustrates synching several sites on a staging server with those sites on production.



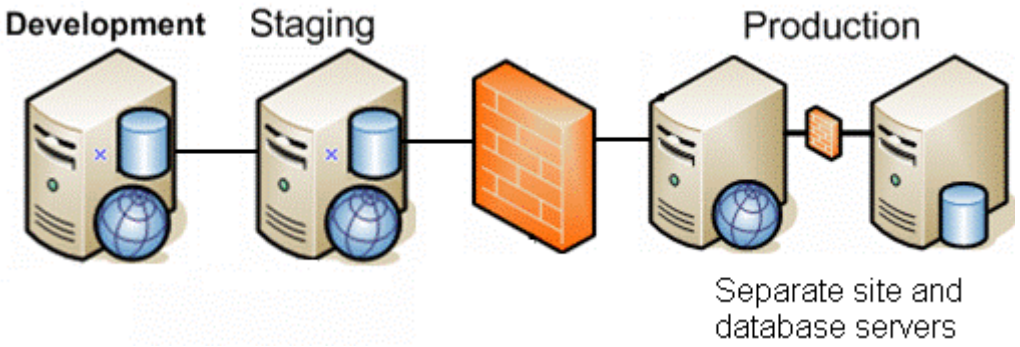
Configuration 3: Several Development Servers, One Staging Server, One Production Server

As shown in the illustration, any number of development servers can sync to each other and to your staging servers.



Configuration 4: One Development Server, One Staging Server, One Production Site Server, One Production Database Server

In this configuration supported by eSync, the production site has two servers: one for site files, and another for the database.

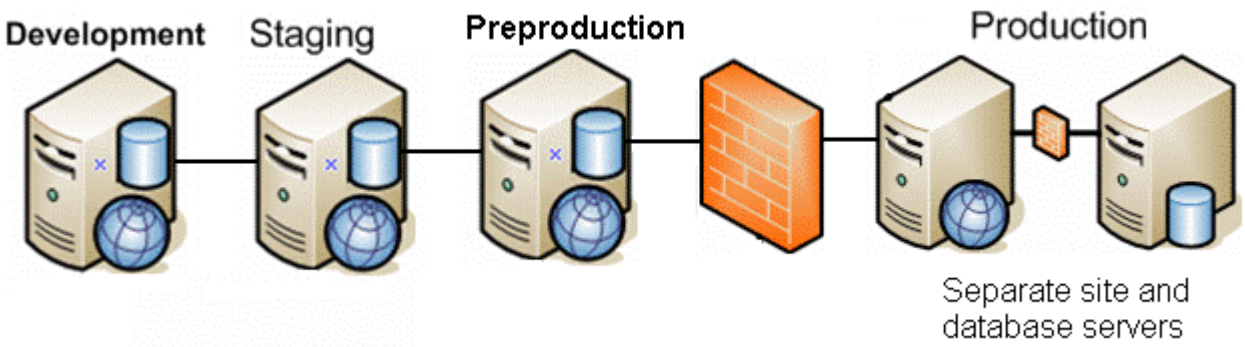


To synchronize these servers, set up several eSync profiles. One syncs the database, assets, and templates to the production database server. Use additional profiles to sync the staging server's workarea files with the production site server.

NOTE When using separate site and database servers, assets are stored on the site server.

Configuration 5: Configuration 4 Plus Pre-Production Server

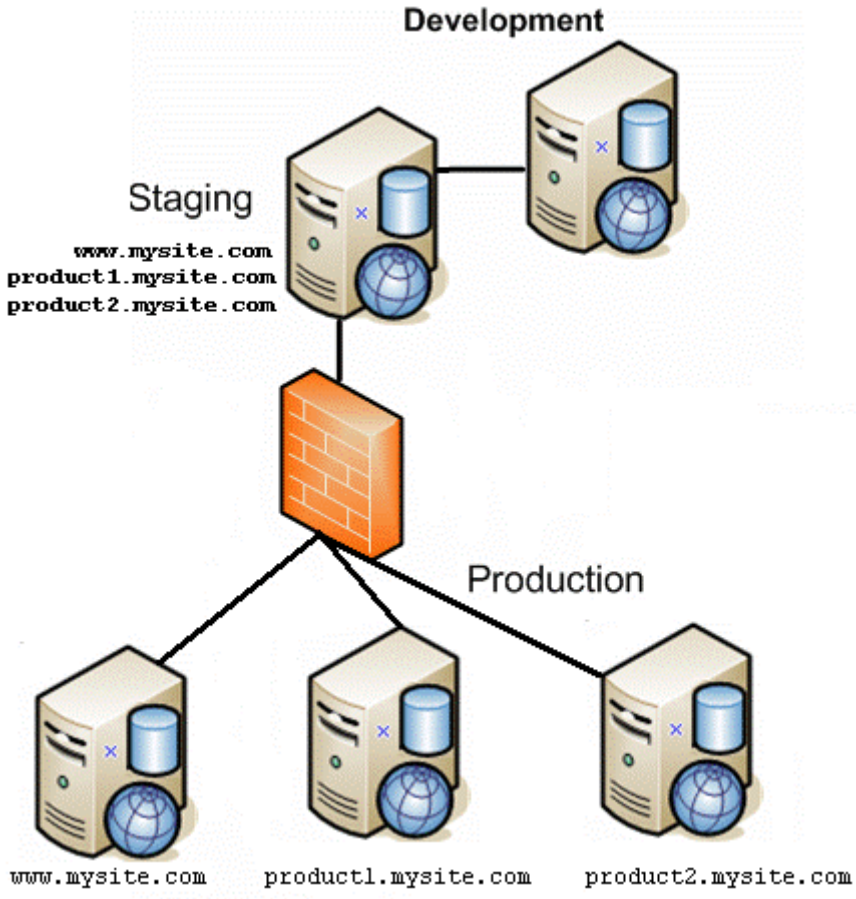
This eSync configuration adds an extra server between staging and production. The preproduction server can be used for review and testing of changes before they are moved to production.



Configuration 6: Multi-site Configurations, Each Site and Database on its own Production Server

In this configuration, each production server has its own database plus the site files. As an alternative, you could have a separate

server for each production database, with all sites on one production server.



NOTE The above configuration also supports separate site and database servers.

To synchronize this type of configuration, set up several eSync profiles, one for each site.

- Three database and template profiles
- Three Workarea profiles

The Server Number

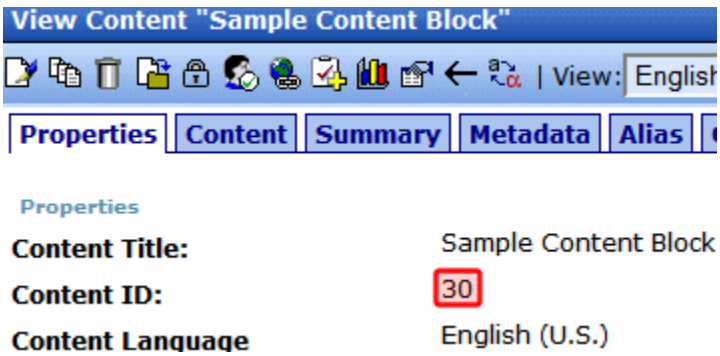
Every server in a sync configuration is assigned a unique number. The originating server is numbered 1, the first server with which it establishes a relationship is numbered 2, etc.

The server number is in the serverinfo.xml file, located in the `c:\sync\inetpub\wwwroot\siteroot` folder, as shown below.

```
<SyncServerInfoList>
  <SyncServerInfo IsSyncRunning="true" MaxId="2" ServerNumber="1" IsMulti-SiteStaged="false">
    <ServerId>b0cccb5a-1d45-4262-8857-79f1333696dc</ServerId>
    <ServerUrl>http://localhost:8732/Ektron.Sync.Communication/
SyncCommunicationScheduleService.svc</ServerUrl>
    <ConnectionInfo>server=WS10080\SQLExpress;database=CMS400Developer;Integrated
Security=TRUE;user=;pwd=;</ConnectionInfo>
  </SyncServerInfo>
</SyncServerInfoList>
```

Unique ID Numbering

All **Ektron CMS400.NET** data is assigned a unique ID number to distinguish it from similar objects. Examples are content (see illustration below), folders, menus, users, etc.



When you create a sync relationship, **Ektron CMS400.NET** applies to each server a new ID numbering range to ensure that, from then on, objects created on either server have a unique ID. This prevents collisions when synching between servers. For example, since membership users created on a production server have a different ID number range from those created on the staging server, eSync does not overwrite them.

To view a server's ID number range, open its serverinfo.xml file, located in the `c:\sync\inetpub\wwwroot\siteroot` folder, and check the MaxId value (highlighted in red below).

```
<SyncServerInfoList>
  <SyncServerInfo IsSyncRunning="true" MaxId="1" ServerNumber="1" IsMulti-SiteStaged="false">
    <ServerId>b0cccb5a-1d45-4262-8857-79f1333696dc</ServerId>
```

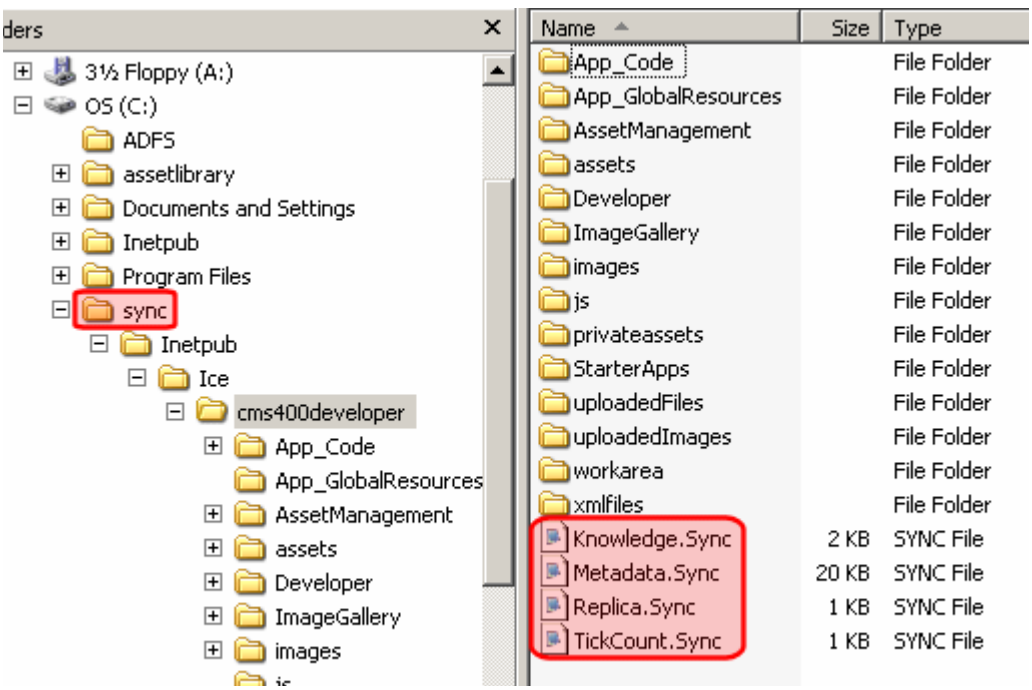
```
    <ServerUrl>http://localhost:8732/Ektron.Sync.Communication/
SyncCommunicationScheduleService.svc</ServerUrl>
    <ConnectionInfo>server=WS10080\SQLExpress;database=CMS400Developer;Integrated
Security=TRUE;user=;pwd=;</ConnectionInfo>
  </SyncServerInfo>
</SyncServerInfoList>
```

Multiply that number by 1 trillion to get the largest ID number which that server can assign. So for example, if `MaxId` = 3, possible ID numbers range from 2,000,000,000,001 to 3,000,000,000,000.

eSync Moves Changes Only

eSync only copies data that changed since the last sync. So, for example, if your site has 100 menus but only 3 changed since the last sync, it only copies three. As a result, eSync is very quick.

To track changes to **Ektron CMS400.NET** data between syncs, eSync sets up a `c:\sync` folder structure that mirrors your site's Windows folder structure. This structure is created on each server when sync relationships are first established.



No **Ektron CMS400.NET** files reside in the `\sync` folders. Instead, each folder has four .sync files that monitor changes to the **Ektron CMS400.NET** files in the corresponding folder.

Managing eSync Security Certificates

Ektron CMS400.NET's eSync feature uses security certificates to ensure secure communication between servers. That is, all servers in an eSync configuration must have matching, encrypted security certificates in order to establish an eSync relationship.

NOTE If your configuration features separate database servers, you do not need to install security certificates on them. You only need to install certificates on servers that host Ektron CMS400.Net.

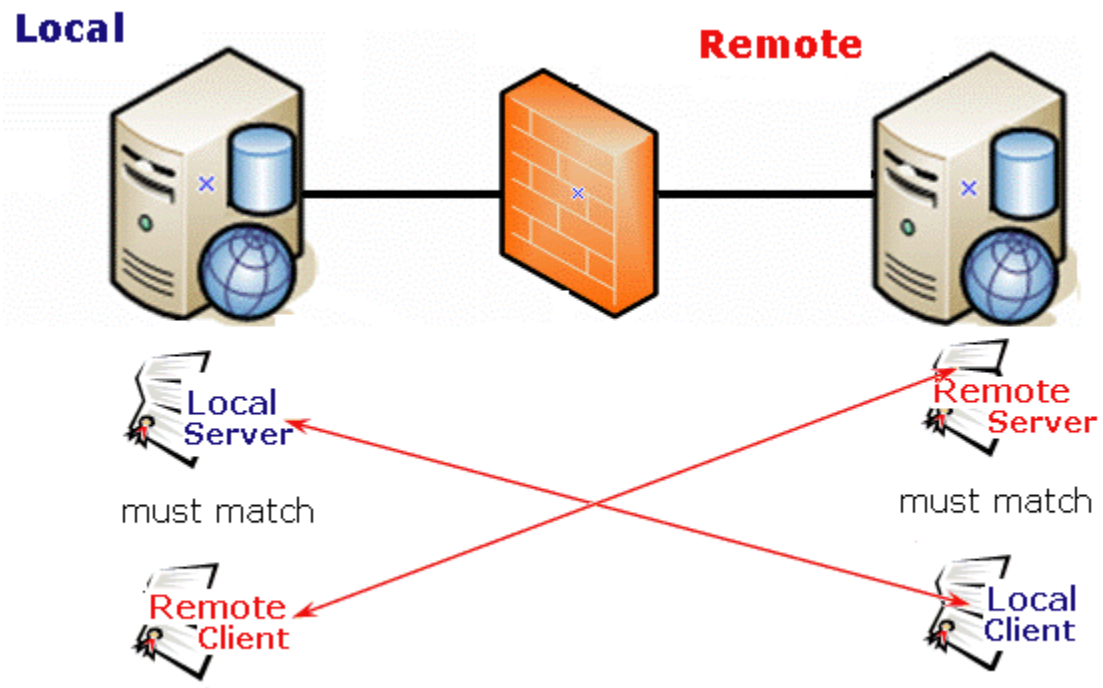
This section explains how to create and replace security certificates on a server through the following topics.

- "The Client and Server Certificates" on page 1313
- "Installing Security Certificates" on page 1315
- "Regenerating Security Certificates" on page 1321
- "Troubleshooting Security Certificates" on page 1322

See Also: "Create eSync Security Certificates for a Load Balanced Cluster" on page 1359

The Client and Server Certificates

Before you can establish an eSync relationship between servers, each server must have its own (local) security certificate *and* one from every other server in the configuration, as shown below.



certificates connected by arrows must match for eSync to occur

As another example, if an eSync configuration consists of five servers, each server would require five security certificates: one local and four remote certificates.

Each server creates two sets of certificates: a server and a client set. Then, you copy the certificates to the other server. The local machine's *server* certificate must match a *client* certificate on the remote server, and vice versa.

Certificates are typically copied only when you first establish an eSync relationship between servers. After that, any eSync activity triggers a background check, and the user can proceed only if the certificates match.

Each certificate consists of the following files.

- Server certificate
  - *servername*_SyncServer.pfx
  - *servername*_SyncServer.pvk

- *servername*_SyncServer.cer

- Client certificate
  - *servername*_SyncClient.pfx
  - *servername*_SyncClient.pvk
  - *servername*_SyncClient.cer

The security certificates can apply to one site or all sites on a server. You determine this when installing them.

See Also: ”Installing Security Certificates” on page 1315

Installing Security Certificates

Prerequisite: Permission to copy and paste files between local and remote servers

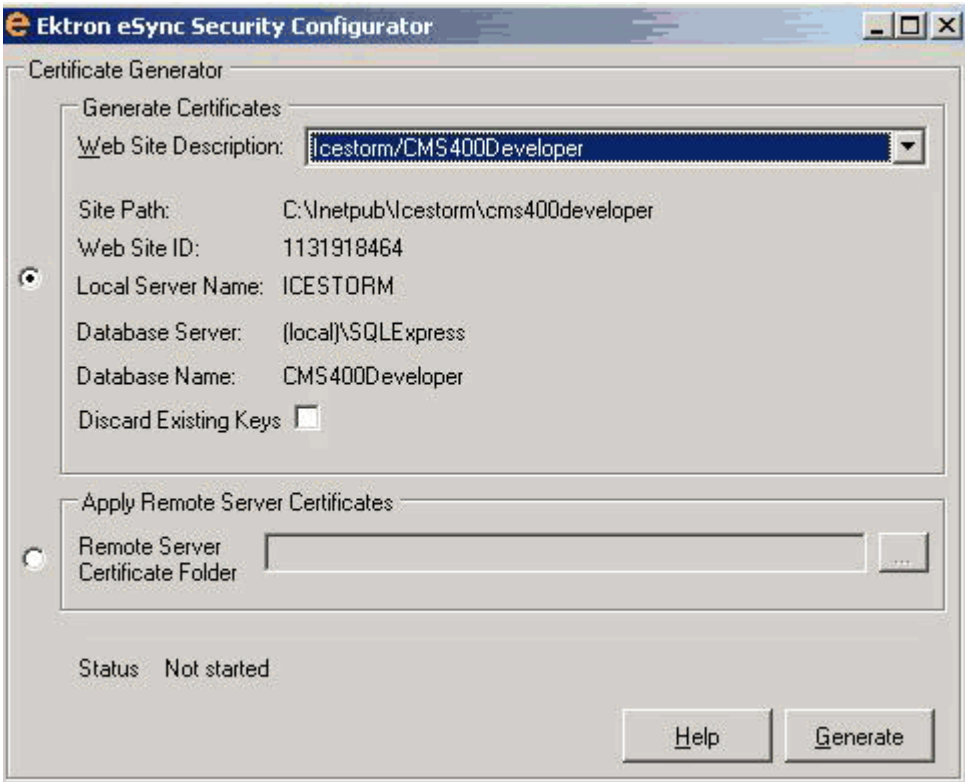
To create and place eSync security certificates in the correct locations, follow these steps.

- ”Step 1: Create Security Certificates on Your Local Server” on page 1315
- ”Step 2: Create Security Certificates on the Remote Server” on page 1317
- ”Step 3: Copy Local Client Certificate to Remote Server” on page 1318
- ”Step 4: Copy Remote Client Certificate to Local Server” on page 1320
- ”Step 5: Test the Security Certificates” on page 1321

Step 1: Create Security Certificates on Your Local Server

1. At the end of the **Ektron CMS400.NET** installation, you are asked if you want to install eSync security certificates. If you agree, the following screen prompts you to enter information needed to create the certificates.

NOTE You can access this screen at any time screen by opening **Windows Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.



Use the following table to complete this screen.

Field	Description
Generate Certificates - Use this screen area to create security certificates that must be copied to a remote server with which you want to sync.	
Web Site Description	If more than one site is set up on this server, use the pull-down list to select the Web site for which you are installing security certificates. Or, click **All** to apply the certificates to all sites on this server.
Apply Remote Server Certificates - Use this screen area to apply eSync security certificates that were copied from a remote server to your local server. *See Also:* "Step 3: Copy Local Client Certificate to Remote Server" on page 1318	

2. Click **Generate**.
3. Local security certificates are created and configured (illustrated below).

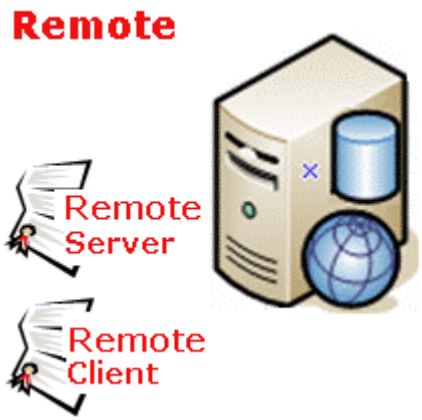
See Illustration

NOTE Only click **OK** once. The status field at the bottom of the screen updates the status as it progresses. If you click **OK** more than once, you delay the certificates' creation.

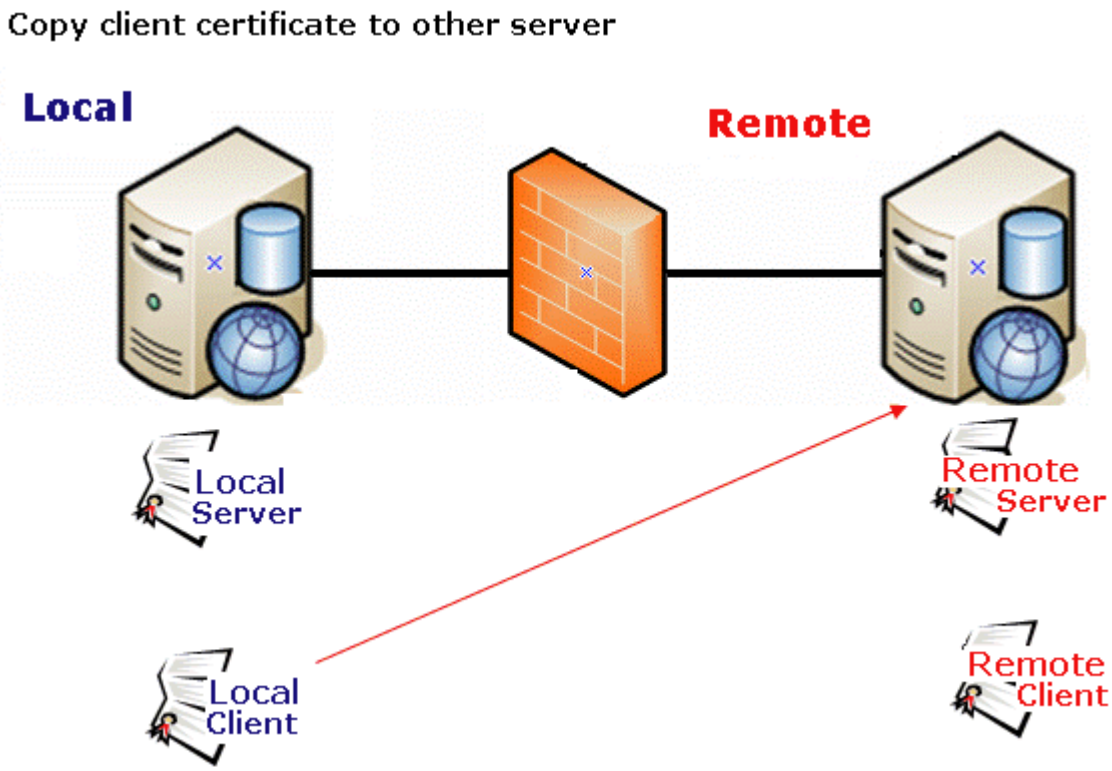
Step 2: Create Security Certificates on the Remote Server

1. Sign on to remote server.
2. Generate security certificates for the remote server, following instructions in "Step 1: Create Security Certificates on Your Local Server" on page 1315.
3. When you complete this procedure, remote client and server security certificates are created and configured (illustrated below).

See Illustration



Step 3: Copy Local Client Certificate to Remote Server



1. On the local server, open two Windows Explorer windows: one showing the local server's file system, and the other showing the remote server's file system.
2. In the remote server window, create a folder underneath the root folder. The folder name is not important.

WARNING! Do not place it under the web root folder, C:\inetpub\wwwroot.

3. In the local server window, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
4. Copy the following files.

   •*servername*_SyncClient.pfx

   •*servername*_SyncClient.pvk

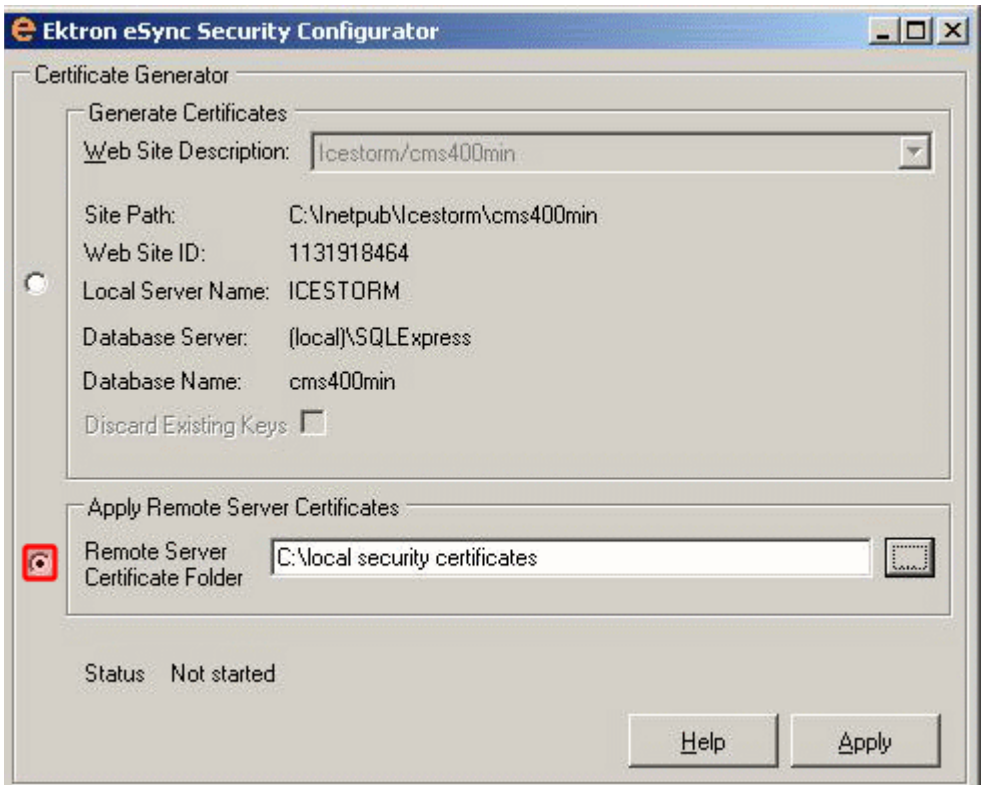
- *servername*_SyncClient.cer
- *servername*_SyncServer.pfx
- *servername*_SyncServer.pvk
- *servername*_SyncServer.cer

NOTE These files were created when you completed the eSync Security Configurator Screen in Step 1.

5. Paste the files into the remote server folder that you created in Step 2. Make sure there are no other security files in the folder.

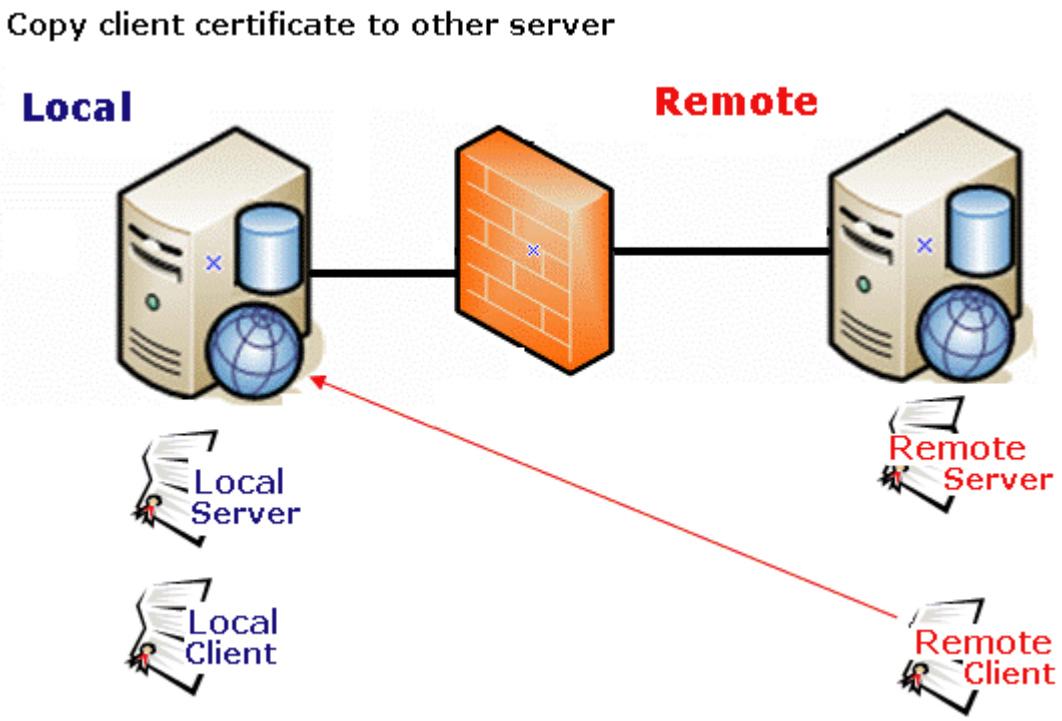
After the local server's security certificates are copied to the remote server, you need to register and move them to the correct folders. The Security Configurator screen does this.

6. On the remote server, open the security configurator screen using this path: **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
7. The security configurator screen appears.



8. Click the **Apply Remote Server Certificates** button (circled above).
9. Click the browse button next to that field.
10. Browse to the folder to which you pasted the security certificates in Step 5.
11. Click the **Apply** button.
12. The utility copies the security certificates you pasted in Step 5 to the correct folder, and configures them for the remote server.

Step 4: Copy Remote Client Certificate to Local Server



1. Sign on to the remote server.
2. Follow the steps described in "Step 3: Copy Local Client Certificate to Remote Server" on page 1318, except substitute remote for local.

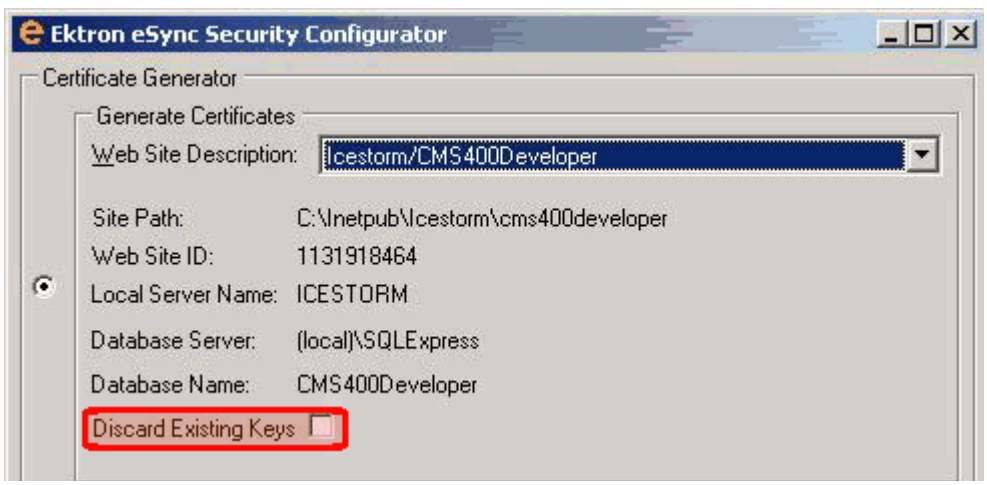
Step 5: Test the Security Certificates

1. From the local server, sign on to **Ektron CMS400.NET**.
2. In the Workarea, go to **Settings > Configuration > Synchronization**.
3. Click the plus sign ( ).
4. Insert the name of the **Remote Server**.
5. Select the security certificate you are testing.
6. Click **Connect**.
7. If the next screen appears, the security certificates are working properly.

Regenerating Security Certificates

Follow these steps to regenerate security certificates. You may need to do this if they stop working, or you are concerned about a security breach.

1. Access the eSync Security Configurator screen via **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
2. Use the **Web Site** pulldown field to select a site on your server, or choose **All** sites.
3. Click the **Discard Existing Keys** checkbox (circled below).



4. Click **Generate**.

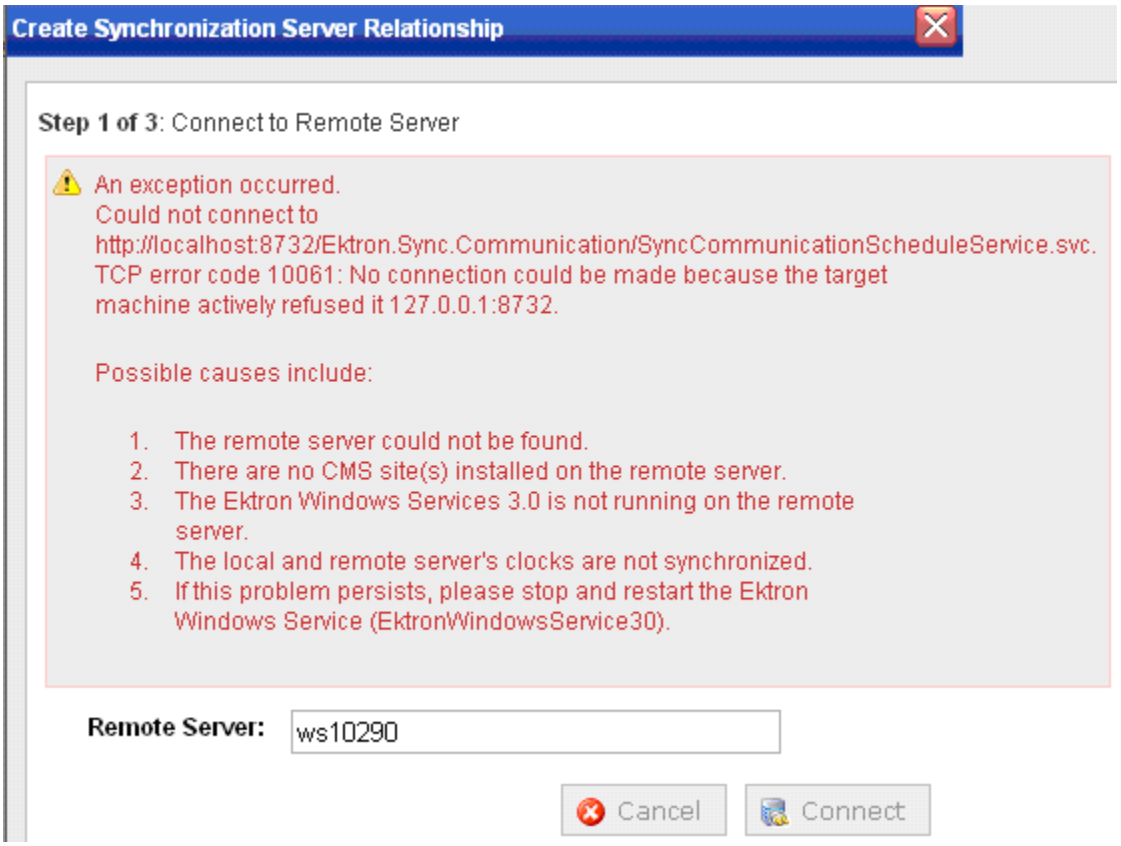
5. The existing security certificates are removed from your local server.
6. Reopen the Security Configurator screen.
7. Choose the correct Web Site, verify the other settings, and click **Generate**. *See Also:* ”Step 1: Create Security Certificates on Your Local Server” on page 1315
8. This action generates new security certificates on your server.
9. Copy the new certificates to all other servers in the eSync configuration. This is explained in ”Step 3: Copy Local Client Certificate to Remote Server” on page 1318.

Troubleshooting Security Certificates

- ”Could Not Connect Error” on page 1322
- ”No Endpoint Error” on page 1324

Could Not Connect Error

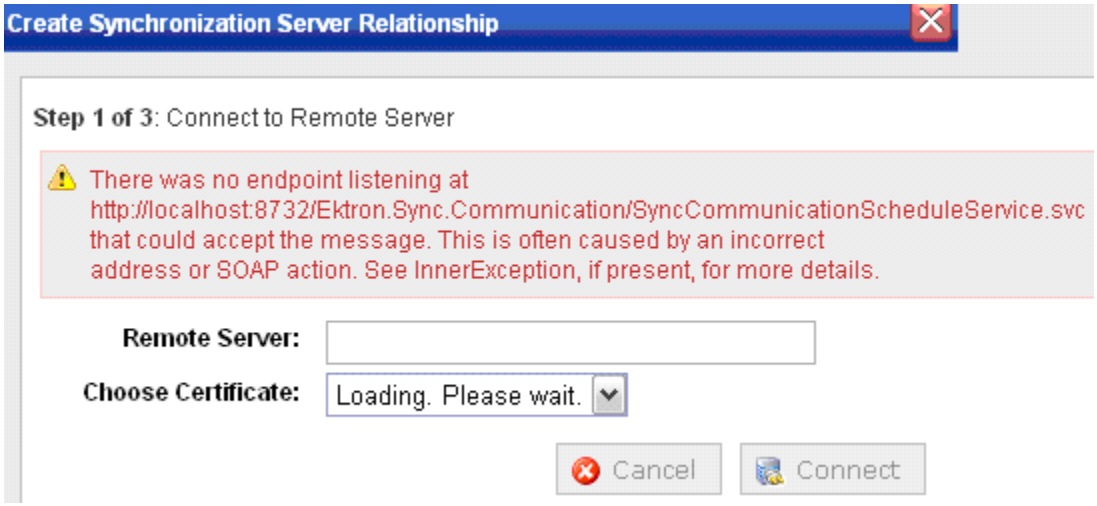
When trying to connect to a remote server, after selecting a security certificate, you may see the following message.


Create Synchronization Server Relationship
Step 1 of 3: Connect to Remote Server
An exception occurred.
Could not connect to
http://localhost:8732/Ektron.Sync.Communication/SyncCommunicationScheduleService.svc.
TCP error code 10061: No connection could be made because the target
machine actively refused it 127.0.0.1:8732.
Possible causes include:
1. The remote server could not be found.
2. There are no CMS site(s) installed on the remote server.
3. The Ektron Windows Services 3.0 is not running on the remote server.
4. The local and remote server's clocks are not synchronized.
5. If this problem persists, please stop and restart the Ektron Windows Service (EktronWindowsService30).
Remote Server:
ws10290
Cancel
Connect

Here are some steps to resolve the problem.

- Check the Windows Event Viewer > EktronL2 log for the error. If the service is hosted but already exists, stop then start the service (do not restart).
- The certificates may be corrupted. To resolve this, see "Regenerating Security Certificates" on page 1321.

No Endpoint Error


Create Synchronization Server Relationship
Step 1 of 3: Connect to Remote Server
There was no endpoint listening at http://localhost:8732/Ektron.Sync.Communication/SyncCommunicationScheduleService.svc that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.
Remote Server:
Choose Certificate:
Loading. Please wait.
Cancel
Connect

The above error indicates that

- the remote site may not be on the same **Ektron CMS400.NET** version as the local site, *or*
- the Ektron Windows Service is not started

Using eSync to Initialize a New Site

Typically, before you begin using eSync, one server hosts an **Ektron CMS400.NET** Web site, and you want to bring other servers into the configuration. After the servers are synchronized, one will be the *staging server* (the one on which content is created or updated, then approved). Another server, *production*, hosts your live Web site.

IMPORTANT! The names of the site and all folders *must* match on both servers. This is because paths to images, xslt files, etc. refer to a site and its folders. If the servers' site and folder names do not match, the links break.

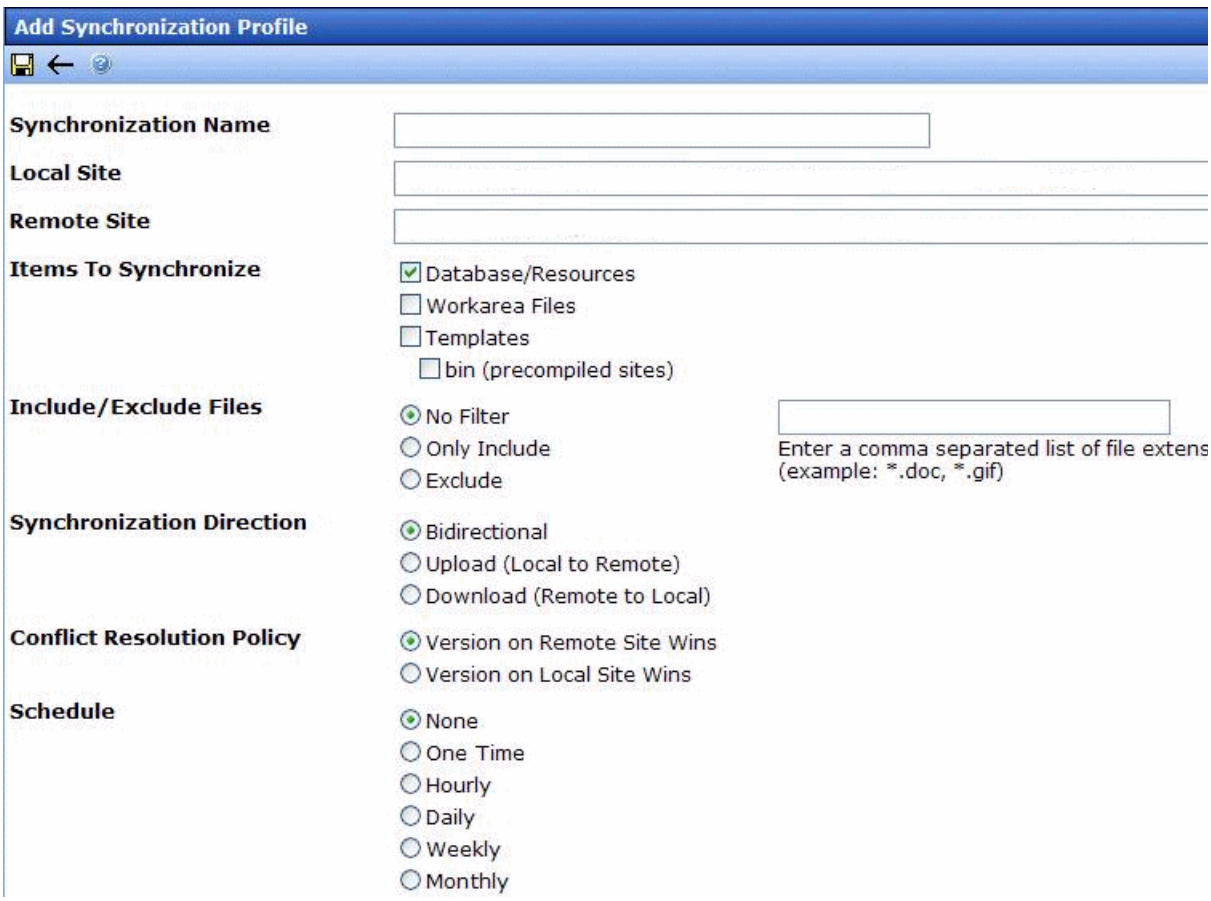
First, use eSync to initialize the new servers from the existing one. This process is described in "Setting Up eSync" on page 1263. Afterwards, use eSync to periodically sync updated content, folders, users, menus, etc.

Setting up eSync Profiles

To minimize data entry, eSync saves your specifications about an individual eSync job in a sync *profile*. So, after you enter specifications the first time, just select the profile every subsequent time you want to sync. A profile contains information about the

- source and destination databases
- type of data being synched
- files to include/exclude
- direction
- schedule

Use the Add Synchronization Profile screen to create and update eSync profiles.

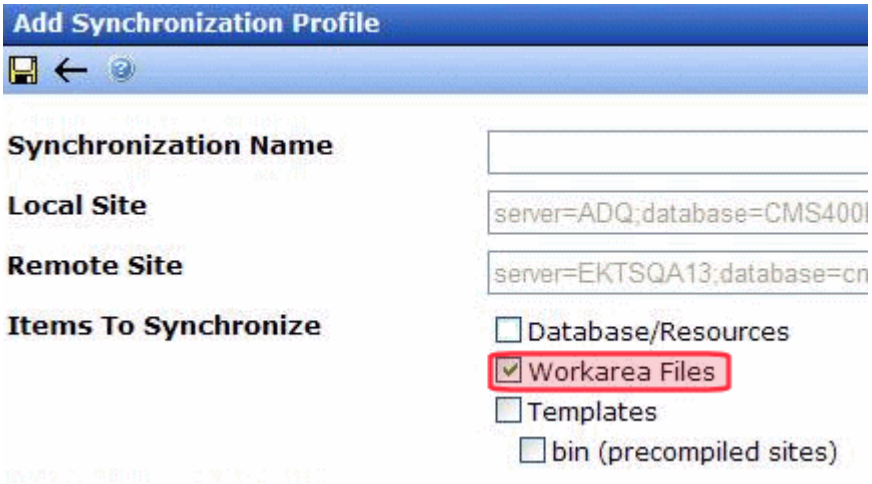


While following the steps in "Setting Up eSync" on page 1263, you created a default database and a template profile. This section explains how to modify those profiles and create new ones.

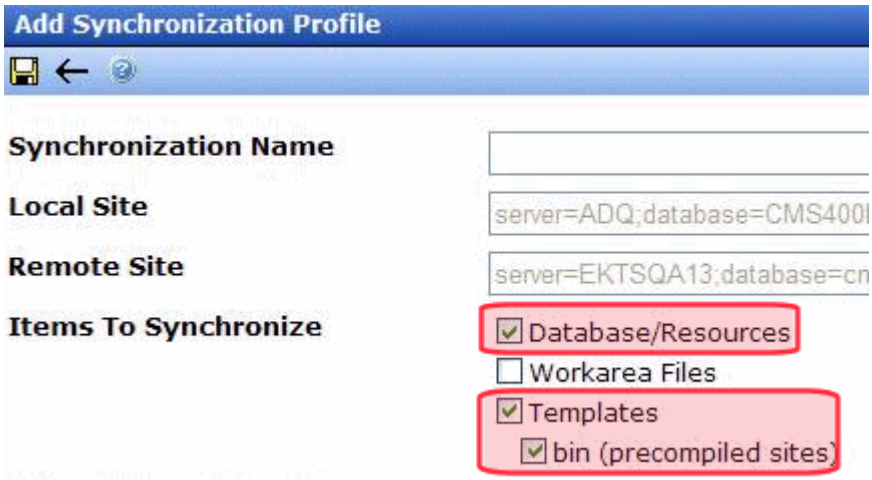
To eSync an entire Web site, you need a minimum of two profiles: one for your `web site root/Workarea` folder, and another for all other site files.

To create a profile for

- your `Workarea` folder, click **Workarea Files** under **Items to Synchronize**.



- all other site files, click **Database/Resources**, **Templates** and **Bin** under **Items to Synchronize**.



The following table explains the kinds of files synched by each category.

Items to Synchronize	Type of data synched	Exceptions	For setup instructions, see
Database/ Resources	The database plus the following site root folders • assets • Privateassets • uploadedimages • uploadedfiles	See "Global File Type Exceptions" on page 1328	"Setting up a Profile to Sync a Database and Assets" on page 1329
Workarea Files	All files in the site's `Workarea` folder other than the exceptions	Files in these folders: • ewebeditpro • help • explorer • ewebdiff • documents • foundation • resources • sync *See Also:* "Global File Type Exceptions" on page 1328	"Setting up a Profile to Sync Workarea Files" on page 1331

Items to Synchronize	Type of data synched	Exceptions	For setup instructions, see
Templates	All files in your site root folder other than the exceptions Note: If you perform an initial sync of a recently-installed min site with your staging site, the min site's templates could overwrite templates on your staging site. This is because, when two templates have the same name, the most recently modified one overwrites the other. To avoid this, rename the only template installed with the min site (login.aspx) before performing the initial template sync. You should also rename login.aspx's supporting files, such as login.aspx.vb. Note: If you create a new Windows folder within the site root folder, sync it, then later delete the new folder and sync again, the new folder will not be deleted from the destination server.	Files in these folders: • workarea (covered by Workarea Files sync) • assets, privateassets, uploadedfiles, uploadedimages (covered by Database/Resources sync) • bin (covered by **Bin** checkbox, below) • app_webreferences • latestchanges • app_globalresources These files: • assetManagement.config • web.config *See Also:* "Global File Type Exceptions" on page 1328 Note: If you create a folder within your site root and name any folders under that folder `assets`, `privateassets`, `uploadedfiles`, or `uploadedimages`, those folders are not synched.	"Setting up a Profile to Sync Template and Bin Files" on page 1333
Bin	The bin folder		

You can also set up a profile that syncs Windows folders. *See Also:* "Synchronizing Windows Files" on page 1337

Global File Type Exceptions

The following file types are *not* synched by default.

- .config files

- .txt files
- .sln files

NOTE **Ektron CMS400.NET** creates a large number of .txt files to support the search functionality.

However, you can add these file types to a sync profile via the **Include/Exclude Files** field. *See Also:* "At the Include/Exclude files field, include files not normally synched, or exclude files that are synched by default." on page 1331

Setting up a Profile to Sync a Database and Assets

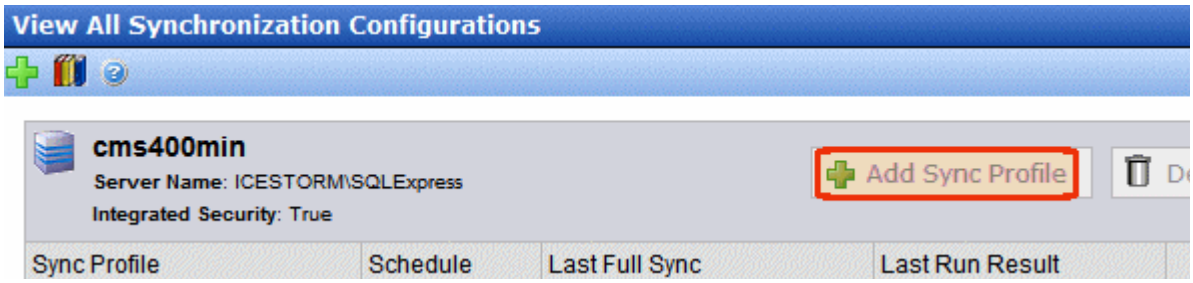
To set up a profile to sync an **Ektron CMS400.NET** database and its assets, follow these steps.

Prerequisite

- You created a Sync configuration and ran an initial sync. *See Also:* "Setting Up eSync" on page 1263

1. Go to the **Settings > Configuration > Synchronization** screen.

   If you are eligible to add a profile to a configuration, **Add Sync Profile** appears, as shown below.



2. Click the **Add Sync Profile** button. The Add Synchronization Profile screen appears.
3. At the **Synchronization name** field, enter a name for this profile.
4. At the **Items to Synchronize** field, select **database and assets**.
5. At the **Synchronization Direction** field, select the direction of the data copy that will occur. Your choices are:

- **Bidirectional** (that is, both directions). Changed data on either server is updated on the other. If the same data (for example, a membership user profile) is updated on both servers, the conflict resolution policy determines the outcome. *See Also:* "Bidirectional Sync" on page 1336; "Conflict Resolution Policy" on page 1336

NOTE If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

- **Upload** - the database and assets are copied from the local server (the one to which you signed on) to the remote server (specified at the Remote Site field above). Items on the remote server are overwritten.
- **Download** - the database and assets are copied from the remote server to the local server. Items on the local server are overwritten.

6. At the **Conflict Resolution Policy field**, decide what to do if Synchronization Direction is Bidirectional, and the data has changed on both servers since the last sync. Your choices are.

   •**Version on Remote Site Wins** - the remote version overwrites the local version

   •**Version on Local Site Wins** - the local version overwrites the remote version

7. If desired, select a schedule for when the sync will run automatically. The choices are

   •**None** - Don't set up a schedule. Run this sync profile as needed via the Sync Profile screen's **Start Now** button.

   •**One Time** - you specify a start time and date

   •**Hourly** - you specify a start date and time. eSync begins on the start date and time, then runs every hour at that time.

   •**Daily** - you specify a start time and date; this sync profile will run every day at this time

   •**Weekly** - you specify a start time, date, and day. After the start date, this sync profile will run this day every week at this time.

   •**Monthly** - you specify a start time and date (numbers 1 through 31). After the start date, this sync profile will run this day every month at this time.

IMPORTANT! You cannot schedule more than one sync to begin at the same time.

NOTE While the following options let you schedule a sync profile, you can sync at any time by accessing the Sync Profile and clicking the Sync button ( ). *See Also:* "Running a Sync" on page 1339

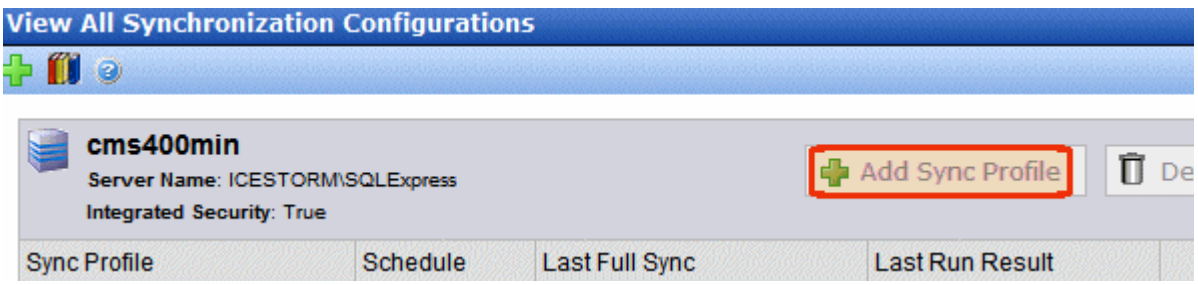
NOTE If you enter a date greater than 28, the sync will not run in a month that does not include that date. For example, if you enter 31, the sync will not run in February, April, June, September, and November.

Setting up a Profile to Sync Workarea Files

Prerequisite

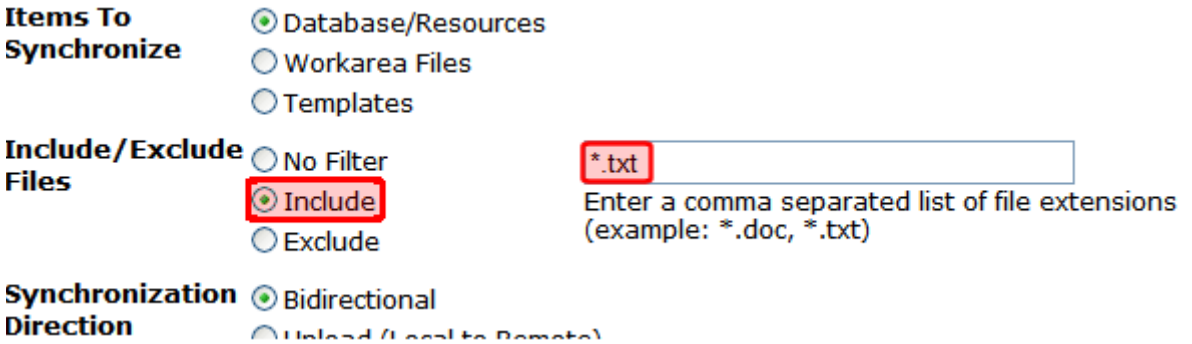
- You created a Sync configuration and ran an initial sync. *See Also:* "Setting Up eSync" on page 1263

1. Go to the **Settings > Configuration > Synchronization** screen.
2. If you are eligible to add a profile to a configuration, **Add Sync Profile** appears on the right side, as shown below.



3. Click the **Add Sync Profile** button. The Add Synchronization Profile screen appears.
4. At the Synchronization name field, enter a name for this profile.
5. At the **Items to Synchronize** field, select **Workarea files**.
6. At the **Include/Exclude** files field, include files not normally synched, or exclude files that are synched by default.

   For example, .txt files are not normally included in a sync, but you want to copy several on your staging server to the production server. In this case, check **Include** and enter ***.txt** into the adjacent field (illustrated below). If you do, only files with that extension are synched.



As an example of the **Exclude** option, assume you do not want to sync Flash (.swf) files. If you check the **Exclude** button, and enter .swf into the text field, eSync ignores them.

NOTE By default, eSync ignores .config and .txt files.

7. At the **Synchronization Direction** field, select the direction of the data copy that will occur. Your choices are:

- **Bidirectional** (that is, both directions). Changed data on either server is updated on the other. If the same data (for example, a membership user profile) is updated on both servers, the conflict resolution policy determines the outcome. *See Also:* "Bidirectional Sync" on page 1336; "Conflict Resolution Policy" on page 1336

NOTE If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

- **Upload** - if the file on the local server was modified more recently than the one on the remote server, the local file replaces the remote. Otherwise, nothing happens.
- **Download** - if the file on the remote server was modified more recently than the one on the local server, the remote file replaces the local. Otherwise, nothing happens.

8. At the **Conflict Resolution Policy field**, decide what to do if Synchronization Direction is Bidirectional, and the data has changed on both servers since the last sync. Your choices are.

•**Version on Remote Site Wins** - the remote version overwrites the local version

•**Version on Local Site Wins** - the local version overwrites the remote version

9. If desired, select a schedule for when the sync will run automatically. The choices are

   •**None** - Don't set up a schedule. Run this sync profile as needed via the Sync Profile screen's **Start Now** button.

   •**One Time** - you specify a start time and date

   •**Hourly** - you specify a start date and time. eSync begins on the start date and time, then runs every hour at that time.

   •**Daily** - you specify a start time and date; this sync profile will run every day at this time

   •**Weekly** - you specify a start time, date, and day. After the start date, this sync profile will run this day every week at this time.

   •**Monthly** - you specify a start time and date (numbers 1 through 31). After the start date, this sync profile will run this day every month at this time.

IMPORTANT! You cannot schedule more than one sync to begin at the same time.

NOTE While the following options let you schedule a sync profile, you can sync at any time by accessing the Sync Profile and clicking the Sync button ( ). *See Also:* "Running a Sync" on page 1339

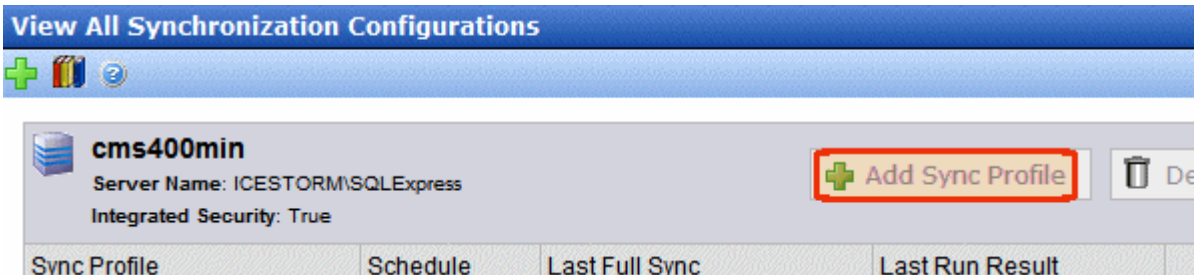
NOTE If you enter a date greater than 28, the sync will not run in a month that does not include that date. For example, if you enter 31, the sync will not run in February, April, June, September, and November.

Setting up a Profile to Sync Template and Bin Files

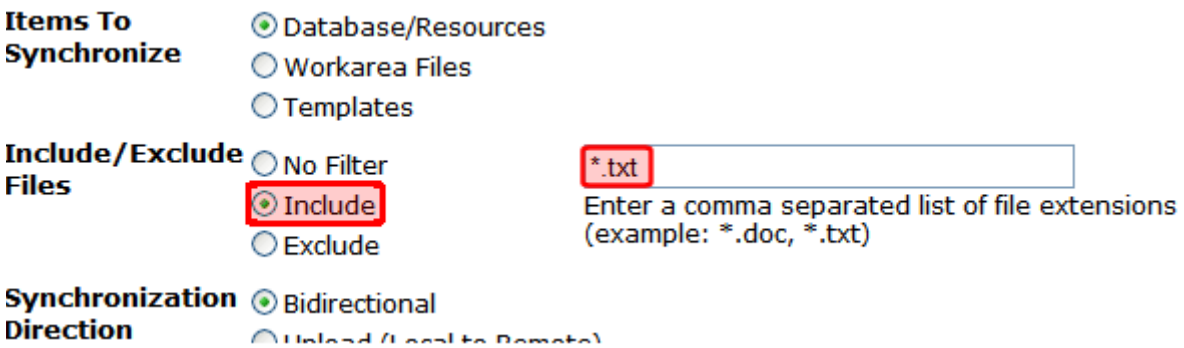
Prerequisite

- You created an eSync configuration and ran an initial sync. *See Also:* "Setting Up eSync" on page 1263

1. Go to the **Settings > Configuration > Synchronization** screen.
2. If you are eligible to add a profile to a configuration, **Add Sync Profile** appears, as shown below.



3. Click the **Add Sync Profile** button. The Add Synchronization Profile screen appears.
4. At the **Synchronization name** field, enter a name for this profile.
5. At the **Items to Synchronize** field, select **Templates** and **Bin**.
6. At the **Include/Exclude Files** field, include files not normally synched, or exclude files that are synched by default. For example, .txt files are not normally included in a sync, but you want to copy several on your staging server to the production server. In this case, check **Include** and enter ***.txt** into the adjacent field (illustrated below). If you do, only files with that extension are synched.



As an example of the **Exclude** option, assume you do not want to sync Flash (.swf) files. If you check the **Exclude** button, and enter .swf into the text field, eSync ignores them.

NOTE By default, eSync ignores .config and .txt files.

7. At the **Synchronization Direction** field, select the direction of the data copy that will occur. Your choices are:

•**Bidirectional** (that is, both directions). Changed data on either server is updated on the other. If the same data (for example, a membership user profile) is updated on both servers, the conflict resolution policy determines the outcome.
See Also: "Bidirectional Sync" on page 1336; "Conflict Resolution Policy" on page 1336

NOTE If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

•**Upload** - if the file on the local server was modified more recently than the one on the remote server, the local file replaces the remote. Otherwise, nothing happens.

•**Download** - if the file on the remote server was modified more recently than the one on the local server, the remote file replaces the local. Otherwise, nothing happens.

8. At the **Conflict Resolution Policy field**, decide what to do if Synchronization Direction is Bidirectional, and the data has changed on both servers since the last sync. Your choices are.

   •**Version on Remote Site Wins** - the remote version overwrites the local version

   •**Version on Local Site Wins** - the local version overwrites the remote version

9. If desired, select a schedule for when the sync will run automatically. The choices are

   •**None** - Don't set up a schedule. Run this sync profile as needed via the Sync Profile screen's **Start Now** button.

   •**One Time** - you specify a start time and date

   •**Hourly** - you specify a start date and time. eSync begins on the start date and time, then runs every hour at that time.

   •**Daily** - you specify a start time and date; this sync profile will run every day at this time

   •**Weekly** - you specify a start time, date, and day. After the start date, this sync profile will run this day every week at this time.

   •**Monthly** - you specify a start time and date (numbers 1 through 31). After the start date, this sync profile will run this day every month at this time.

IMPORTANT! You cannot schedule more than one sync to begin at the same time.

NOTE While the following options let you schedule a sync profile, you can sync at any time by accessing the Sync Profile and clicking the Sync button ( ). *See Also:* "Running a Sync" on page 1339

NOTE If you enter a date greater than 28, the sync will not run in a month that does not include that date. For example, if you enter 31, the sync will not run in February, April, June, September, and November.

Bidirectional Sync

Although most CMS data is created and updated on the staging server, certain types of data are collected on the production server. This information can be viewed and edited on the staging server. Here are some examples:

- membership users
- content ratings data
- forum and blog posts
- community folders

When you set up a sync profile to copy this kind of data (maintained in the database), you typically would choose **Bidirectional** as the direction. In this case, if a membership user creates or updates his profile on the production server, those changes are transmitted to staging. On the other hand, if your administrator needs to change that membership user's information, the next eSync transfers that from staging to production.

If changes are made to the same file on both servers since the last sync, your conflict resolution policy determines which data is saved. *See Also:* "Conflict Resolution Policy" on page 1336

NOTE The first time you run a sync for templates or Workarea files, the sync is bidirectional, regardless of the direction you specify on the Synchronization Direction screen.

Conflict Resolution Policy

If you are using bidirectional synchronization (*See Also:* "Bidirectional Sync" on page 1336), and the same item changed on both servers since the last sync, eSync must decide which version should be kept, and which version overwritten.

NOTE If you are using bidirectional sync and only one version was updated since the last sync, the updated version overwrites the unchanged version.

Use the **Conflict Resolution Policy** field to determine which version ends up on both servers after synchronization. The following choices are available.

- **Version on Remote Site Wins** - the remote version overwrites the local version
- **Version on Local Site Wins** - the local version overwrites the remote version

Synchronizing Windows Files

As an alternative to selecting a type of data to sync (using the **File types** radio button), you can sync individual Windows files. For example, you updated a few template files and their related .css files on the staging server, and now want to update the production server without moving everything else.

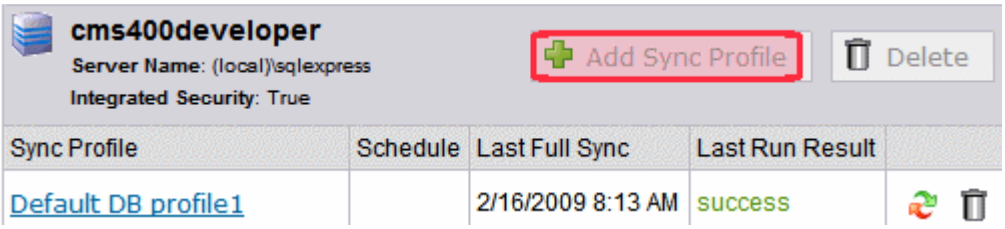
NOTE If you create new HTML content and insert a Library image into it, then sync just that content, the image is not inserted into the destination library nor is it searchable from the destination site. To remedy this problem, perform a database/resources sync.

Unlike the full sync, you cannot schedule a Windows file sync. Instead, you select files then sync immediately.

Like the profile sync, the local file replaces the corresponding remote one *only if* the local file was modified more recently than the one on the remote server. Otherwise, nothing happens.

To synchronize Windows files, follow these steps.

1. Create a sync configuration between the two servers whose files you want to sync. See ”Setting Up eSync” on page 1263.
2. From the View All Synchronization Configurations screen, click the **Add Sync Profile** button (see below).



3. Complete the fields on the screen except for **Schedule**, which the file sync ignores. See "Setting up a Profile to Sync Workarea Files" on page 1331.
4. Save the profile.
5. From the View All Synchronization Configurations screen, click the profile then the Synchronize files button ( ).
6. All folders in your **Ektron CMS400.NET** site root folder appear. Open folders as needed, and check all files to be synched.

NOTE If you create a new folder within the site root folder, sync it, then later delete the new folder and sync again, the new folder will not be deleted from the destination server.

7. Click the Sync now button ( ).
8. A dialog tracks the sync's progress, and notifies you when it is completed.

Optional Steps before Running a Sync

You may want to adjust the web.config and db.config settings before running a Sync. The following topics explain eSync features that you control via the .config files.

- ”Content and Folder Sync Options” on page 1348
- ”Using eSync with Web Alerts” on page 1369
- ”Using eSync with eCommerce” on page 1370
- ”Force Initial Sync” on page 1341
- ”Backing up the Destination Server During an eSync” on page 1343

Running a Sync

IMPORTANT! The names of the site and all folders *must* match on both servers. This is because paths to images, xslt files, etc. refer to a site and its folders. If the servers’ site and folder names do not match, the links break.

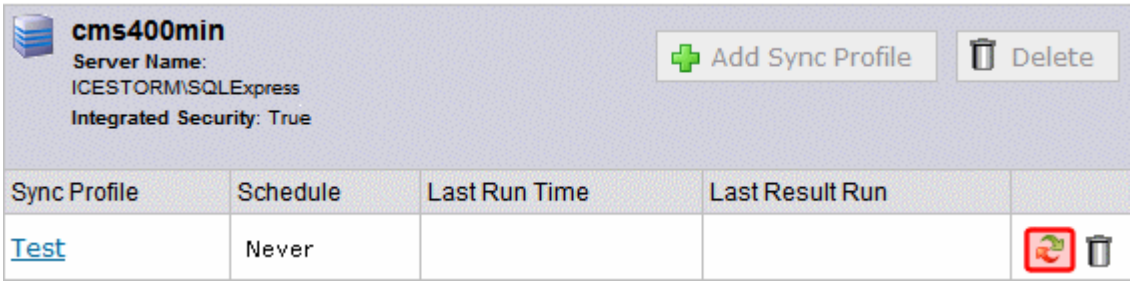
WARNING! You cannot run two eSyncs simultaneously.

Prerequisites

- ”eSync Requirements” on page 1303
- You created an eSync configuration and profile. See ”Setting Up eSync” on page 1263.
- You are not signed on to a production server that is outside the firewall. This is because you cannot sync *from* a production server outside the firewall to other servers - you can only sync *to* this production server.

As mentioned in ”Setting up eSync Profiles” on page 1325, you can set up eSync to run on a schedule. However, you can also sync at any time. Follow these steps to sync a profile immediately.

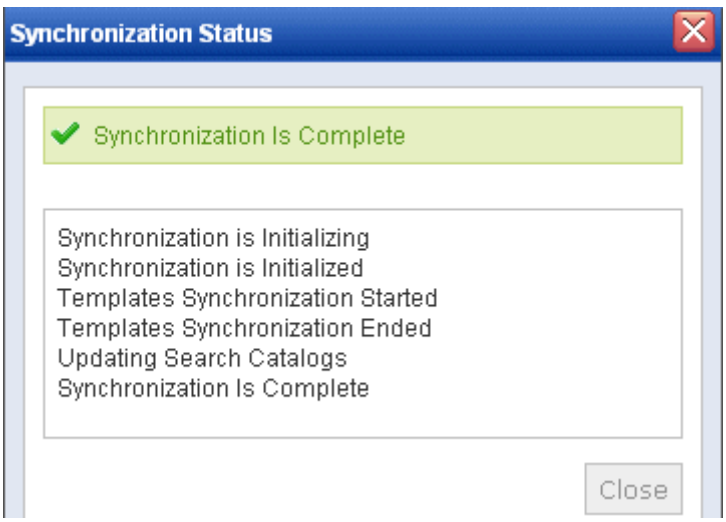
1. Go to the **Settings > Configuration > Synchronization** screen.
2. If a profile is ready for you to sync, a sync button appears in the right column, as circled below.



3. Click the sync button ( ).

NOTE If another sync is running, you are notified. You cannot begin a new sync until the current one finishes.

4. A screen monitors the sync's progress.



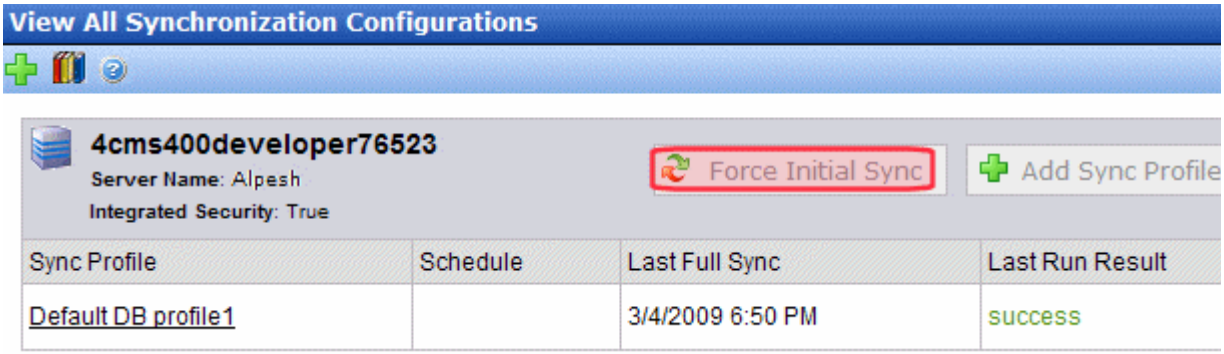
5. The screen indicates when the sync is complete.

NOTE You can close the window and reopen it at any time by clicking the sync button ( ). If you do, the sync's current status appears.

WARNING! If you performed a database sync and the site being synched uses URL aliasing, you must go to its URL Aliasing Configuration screen and click the Refresh button ( ) to update its aliasing information.

Force Initial Sync

Use the Force Initial Sync button to reinitialize a server that was previously initialized.



Here's a scenario in which you would want to use Force Initial Sync.

1. You initialized a test server from your current **Ektron CMS400.NET** server.
2. You experimented on the test server by adding new content, deleting content, etc.
3. You no longer want the test server's database. Instead, you want to reinitialize the test server from the **Ektron CMS400.NET** server.

To accomplish step 3, use the Force Initial Sync button. The button only appears when all prerequisites are present. *See Also:* "Force Initial Sync Prerequisites" on page 1341

TECHNICAL NOTE

The Force Initial Sync procedure ignores the following checks that are normally made prior to synching:

* the destination database is smaller than the source database
* the site has not been previously staged

Force Initial Sync Prerequisites

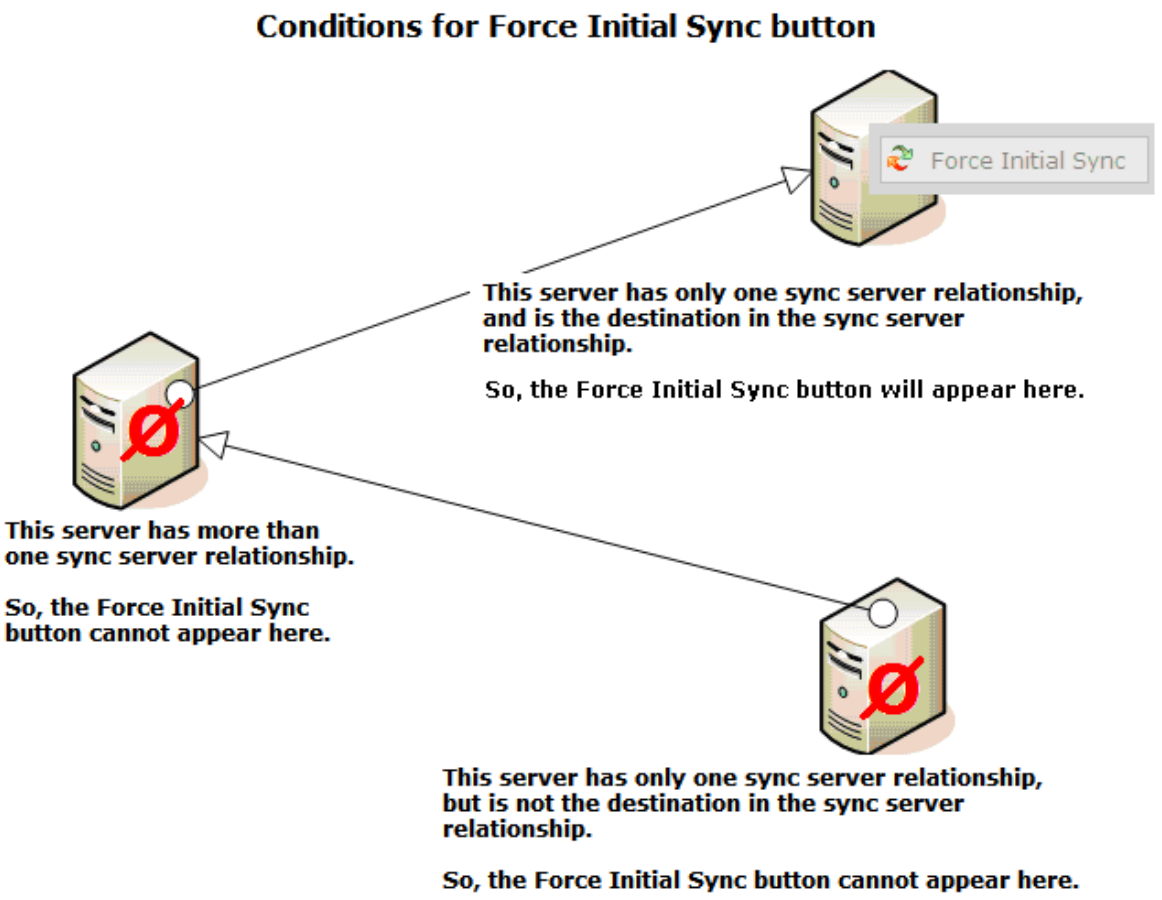
In order to use the Force Initial Sync feature, these conditions must exist.

- The server's web.config file's `ek_ForceReInit` property is set to `true`.

NOTE If the `ForceReInit` property is set to `false`, and you click the Force Initial Sync button, you are informed that you need to change the property to `true` if you want to force an initial sync.

- The site to which you are signed on is not part of a multi-site configuration.
- The server has only one sync server relationship.
- The server is the *destination* in the sync server relationship. In other words, the server must be on the download side of the relationship.

The following image illustrates the last two conditions.


Conditions for Force Initial Sync button
Force Initial Sync
This server has only one sync server relationship, and is the destination in the sync server relationship.
So, the Force Initial Sync button will appear here.
This server has more than one sync server relationship.
So, the Force Initial Sync button cannot appear here.
This server has only one sync server relationship, but is not the destination in the sync server relationship.
So, the Force Initial Sync button cannot appear here.

Backing up the Destination Server During an eSync

You can create a backup of the destination server's database. If you do and problems occur during the sync, the database is automatically restored to its state prior to beginning the backup.

You can specify the backup to occur on the initial sync only, or every time you sync.

NOTE No backup is made when you sync a folder or content. *See Also:* "Content and Folder Sync Options" on page 1348

Setting up the Destination Database Backup

To set up the database backup, follow these steps.

1. Open `C:\Program Files\Ektron\EktronWindowsServcie30\dbsync.config`.
2. Find the following line (near the top).

```
<DatabaseRuntime name="EktronDbSync" logPath="C:\Program
Files\Ektron\EktronWindowsService30\Database\">
```

3. Add the following properties to that tag

- `device` - Following `device`, enter the path to the backup file. Ektron recommends using `C:\Program Files\Microsoft SQL Server\MSSQL.1\MSSQL\Backup\`.
- `backupOption` - possible values

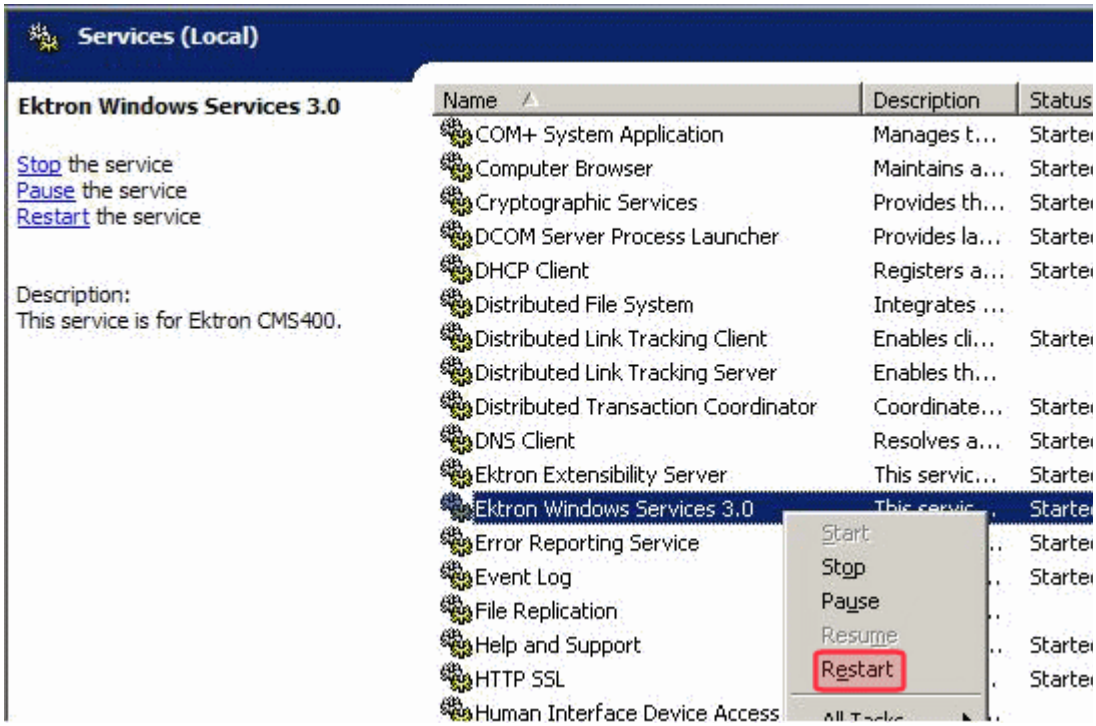
  - 1 - backup on initial sync only

  - 2 - backup every time you run a sync

4. The line should now look something like this:

```
<DatabaseRuntime name="EktronDbSync" device="C:\Program Files\Microsoft SQL
Server\MSSQL.1\MSSQL\Backup\" backupOption="1" logPath="C:\Program
Files\Ektron\EktronWindowsService30\Database\">
```

5. Save the file.
6. Restart the Ektron Windows Service.



Once this is set up, a backup file is created either after the initial sync (if `backupOption="1"`) or after every sync (if `backupOption="2"`).

Here is the file's format:
`[dbname][yyyy][mm][dd][hh][mm][ss][mmm].[product].bak`

For example: `cms400min20090216075946765.esync.bak`.

- See a log of all syncs *See Also:* "Sync Logs" on page 1344

Sync Logs

The View All Synchronization Configurations screen provides a toolbar button ( ) that displays a chronological log of all syncs on your server, with the most recent one at the top.

Synchronization Logs

Log Id	Type	Sync Date	User Id	Applied Changes	Skipped Changes	Total Changes	Status
1	FullSync	6/18/2009	0	0	0	0	✔
2	FullSync	6/18/2009	0	0	0	0	✔
3	FullSync	6/18/2009	0	0	0	0	✔
4	FullSync	6/18/2009	0	0	0	0	✔
5	FullSync	6/18/2009	0	0	0	0	✔
6	FullSync	6/18/2009	0	0	0	0	✔
7	FullSync	6/18/2009	0	0	0	0	✔
8	FullSync	6/18/2009	0	0	0	0	✔
9	FullSync	6/18/2009	0	0	0	0	✔
10	FullSync	6/18/2009	0	0	0	0	✔
11	FullSync	6/18/2009	0	0	0	0	✔

Reviewing Resolved Collisions

To verify the accuracy of the data being synchronized, eSync checks for and resolves the following *matching* items

- user names
- folder names
- metadata definitions
- messages

For example, on the staging server, a user creates a folder directly under the root folder called `Marketing`, and a user on the production server does the same.

NOTES

* In order for folders to match, they must have the same name *and* folder path.
* Both CMS and membership users are included.

This problem only occurs if the matching items were both entered since the last synchronization.

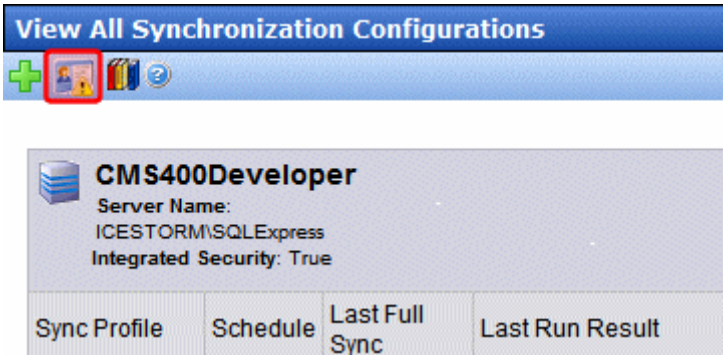
Although matching items have different ID numbers, users cannot tell them apart. So, eSync appends the ID number to the more

recently-created one to distinguish it from the other. For example, `Marketing` becomes `Marketing11329`.

The Review Resolved Collisions Button

To help track these changes, the View All Synchronization Configurations screen has a button ( ) that appears only after such a collision is resolved.

.



The server on which the button appears is explained below.

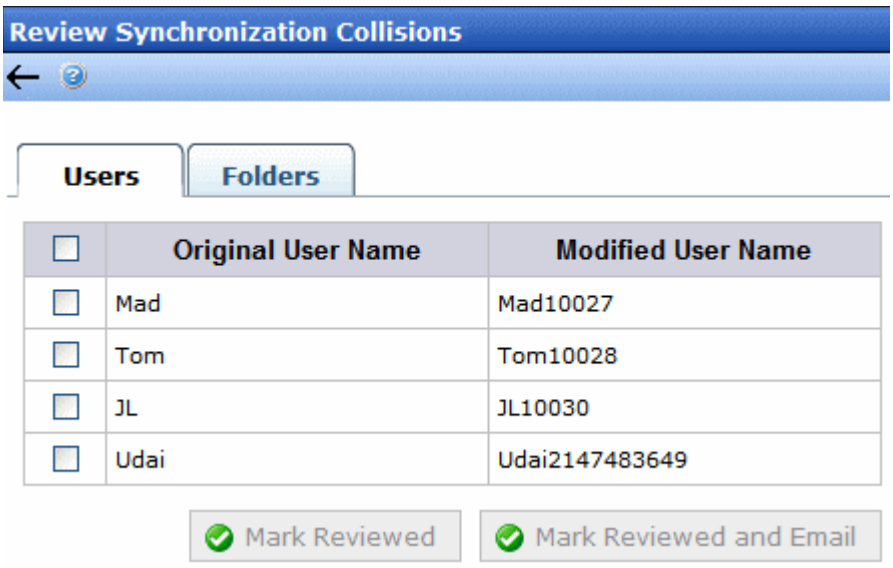
eSync Direction	Collision Resolution Information Appears on this Server
download	local
upload	remote

When you click this button, the Review Synchronization Collisions screen appears, showing the original and changed items.

The Review Synchronization Collisions Screen

This screen shows how collisions between matching items were resolved. *See Also:* ”Reviewing Resolved Collisions” on page 1345

Each type of resolved collision appears on its own tab.



After noting these changes, you can click the box to the left of each change, then click the **Mark Reviewed** button to remove it from the screen. Alternatively, you can click the box in the header row to select all.

The **Users** tab has an additional button, **Mark Reviewed and Email**. Use it to remove the user from the screen and send an email to him/her (using the address from the Add/Edit User screen's **E-Mail Address** field). The email text is below.

```
lbl sync collision email subject = Your username has been changed

lbl sync collision email body = For security purposes, your username
has been changed. Your new username is {0}.  You will need to use
this new username the next time you login.  Thank you.
```

NOTE You can change the text in the resource file. To learn about editing it, see "Procedure for Translating Workarea Strings" on page 929.

Synching Custom Database Tables

You can use eSync to synchronize a custom SQL database table. To do so, follow these steps.

1. Add a new, empty table to the target SQL database.

The table *must* have a primary key and *cannot* use identity columns.

Here is an example of a valid table.

```
Create table foo3(Id int not null primary key clustered, Id2 int not null, company nvarchar(50) null)
```

Here are two examples of invalid tables. The identity columns are highlighted in red.

```
create table foo1(Id int not null identity(1,1) primary key clustered,company nvarchar(50) null)

create table foo2(Id int not null primary key clustered,Id2 bigint not null identity(1,1) ,comapny nvarchar(50) null
```

2. On the server that hosts the source database, navigate to `C:\Program Files\Ektron\EktronWindowsService30`.
3. Open the DbSync.config file.
4. Find the section that begins `<Release version="7.6.6`.
5. Within the 7.6.`<Groups>` tag, you see these names:

```
<add name="default" scope="ektron"
<add name="folder" scope="ektron"
<add name="content" scope="ektron"
<add name="folderrecursive" scope="ektron"
<add name="workflow" scope="workflow"
<add name="custom" scope="custom" schema=""/>
```

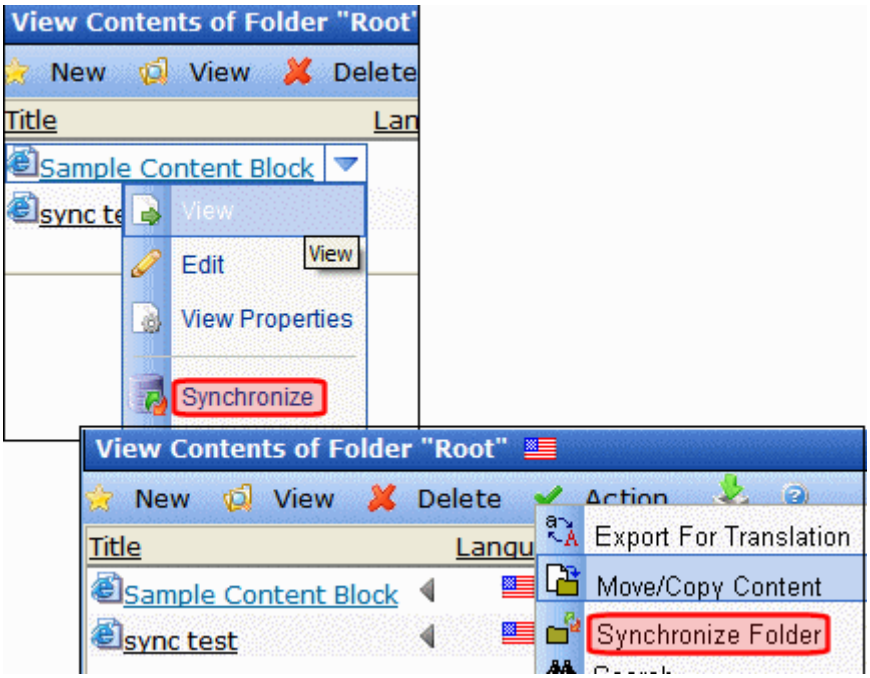
6. Enter your custom table schema within the last line's `schema=""` tag.

NOTE Follow the pattern of the existing schemata when adding yours.

7. Save DbSync.config.
8. Sign on the source server.
9. Follow steps 1 through 7 on that server.
10. Restart the Ektron Windows Service on both servers.
11. Run a DB sync from local to remote (local win).

Content and Folder Sync Options

Members of the Administrators group or those assigned to the Synchronization Admin role can sync individual content items and **Ektron CMS400.NET** folders using context menu options, as shown below.



See Also:

- "Prerequisites for Content/Folder Sync" on page 1349
- "Enabling the Content and Folder Level Sync" on page 1351
- "Using Content and Folder Level Sync" on page 1351
- "Synching a Content Item" on page 1352
- "Synching a Folder" on page 1354

Prerequisites for Content/Folder Sync

See Also: "eSync Requirements" on page 1303

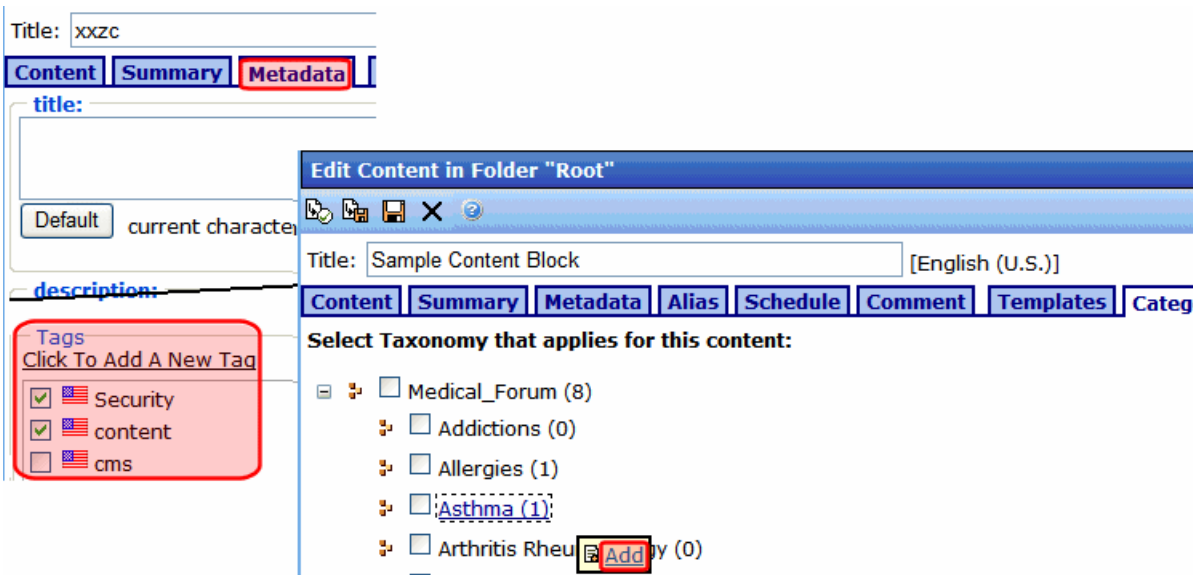
- You are a member of the Administrators group or assigned to the Synchronization Admin role
- Content/folder sync is enabled in web.config. See "Enabling the Content and Folder Level Sync" on page 1351.
- The server has a sync configuration whose initial sync has been run
- *Existing folders*: folder information has not been updated since the last database sync using the selected profile.

If any folder property is changed (for example, a new metadata value is assigned), a database sync must be run before you can synchronize content in that folder and the folder itself.

Furthermore, any child folder (and its content) that inherits that property from the parent folder can only be synchronized after the next database sync.

- N*ew folders*: a database sync must be run before you can synchronize content in the new folder and the folder itself
- C*ontent*: No new *tags* or *taxonomy categories* have been added since the last time the selected profile was synched. If either event has occurred, a database sync must be run before you can synchronize that content. You must also run a database sync for all other profiles that use those tags or taxonomy.

The following graphic illustrates adding new tags and a taxonomy category to content.



- For a folder sync, the content is not a blog or forum post. For a content sync, the content is not a forum post.

Enabling the Content and Folder Level Sync

To set up the content and folder Synchronize options, follow these steps.

1. Log on to the server on which content editors will sync content and folders.
2. Open Windows Explorer > your site root folder > the web.config file.
3. Go to the following area.

```
<eSyncSettings>

<!-- enables or disables eSync feature -->

<add key="eSyncEnabled" value="false"/>

</eSyncSettings>
```

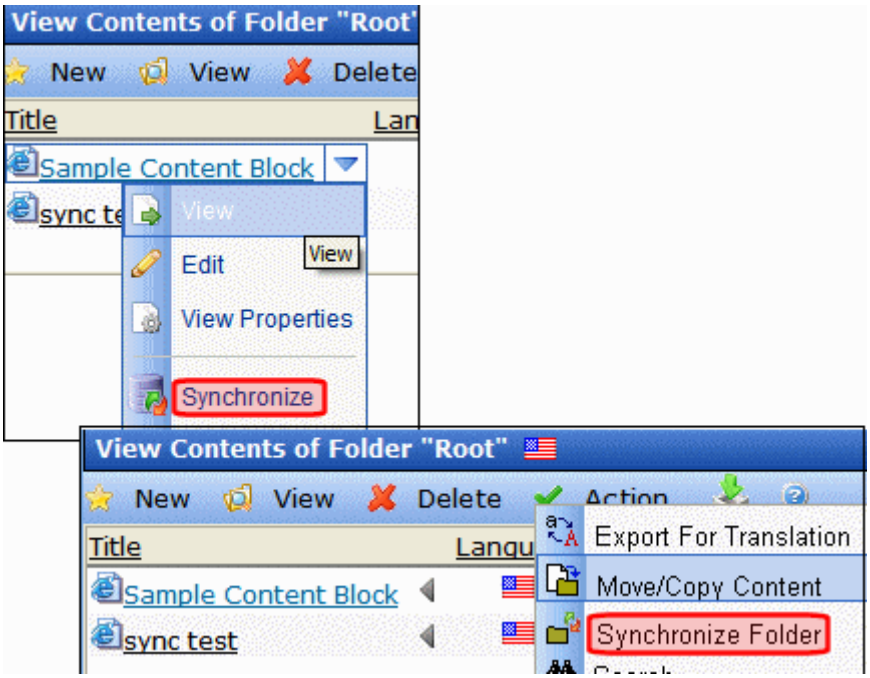
4. Set the value of `eSyncEnabled` to `true`.
5. Save web.config.

Using Content and Folder Level Sync

You would typically use eSync in the following manner.

1. Create, update, and get content approved on a staging server.
2. Synchronize content blocks or an **Ektron CMS400.NET** folder with the production server.

The eSync feature is available if you see **Synchronize** menu options (shown below) on Approved content or a folder.



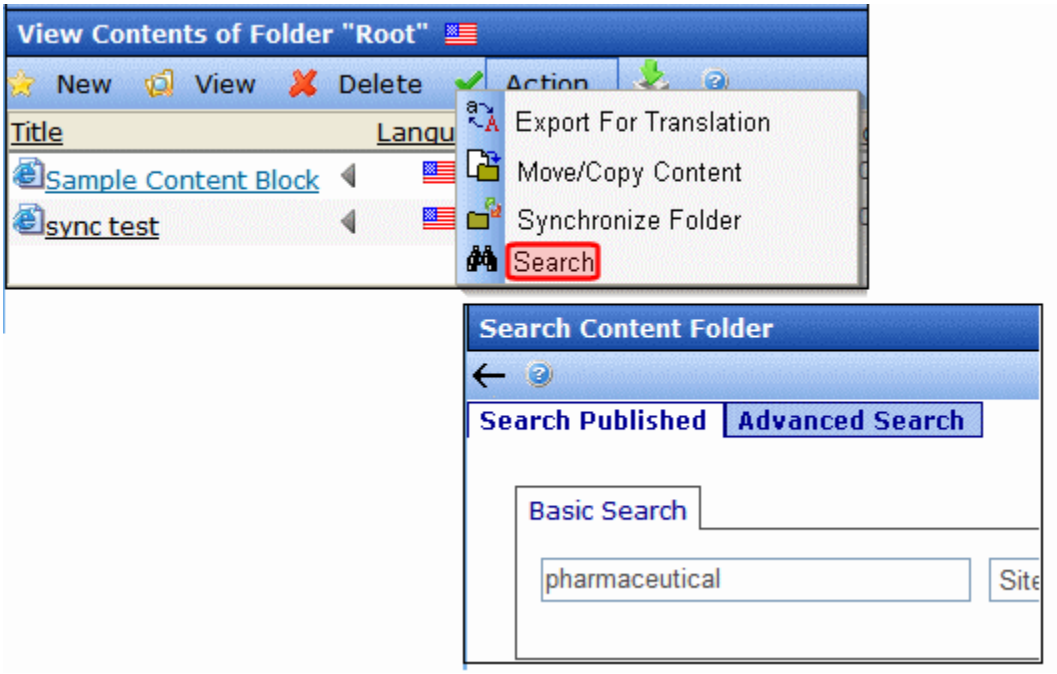
Synching a Content Item

Content sync copies a selected content item to another computer. The sync also copies library resources within that content, such as images and quicklinks.

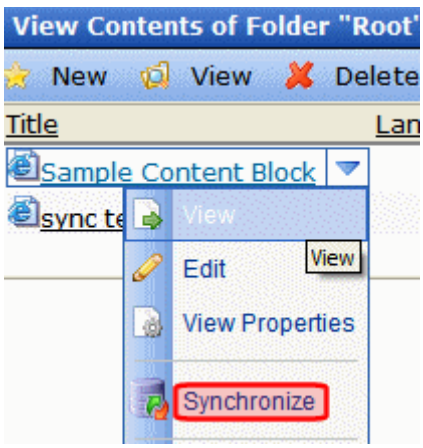
Only Approved content can be synchronized. *See Also:* "Prerequisites for Content/Folder Sync" on page 1349

To sync a content item, follow these steps.

1. Navigate to the content. You can
   - •go to the Web page that displays it
   - •sign into the **Ektron CMS400.NET** Workarea and
     - navigate to its folder, or
     - use the Search to find it (see below)

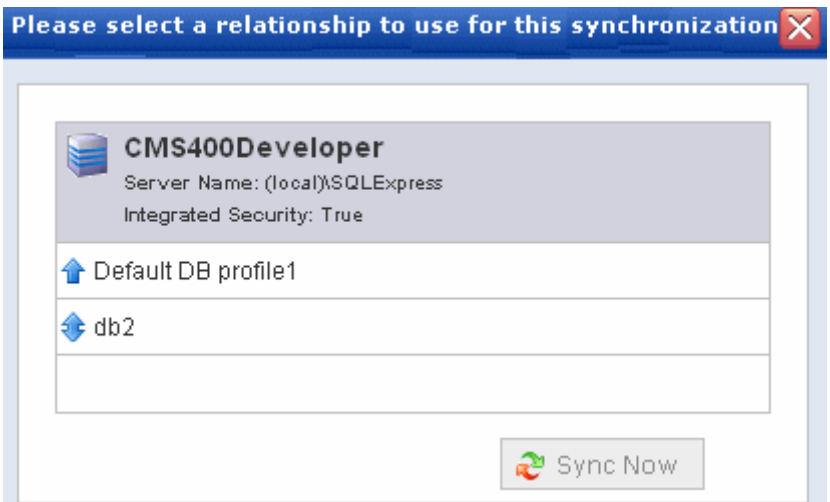


2. Click the arrow to the right of the content to see its dropdown menu.



NOTE A Synchronize button (shown below) is also available from the View Content screen.

3. Click **Synchronize**.
4. All relationships with at least one Database profile whose direction is **Upload** or **Bidirectional** appear. Select the appropriate one. *See Also:* "Setting up eSync Profiles" on page 1325



5. Click **Sync Now**.
6. The content is synchronized with the selected database.

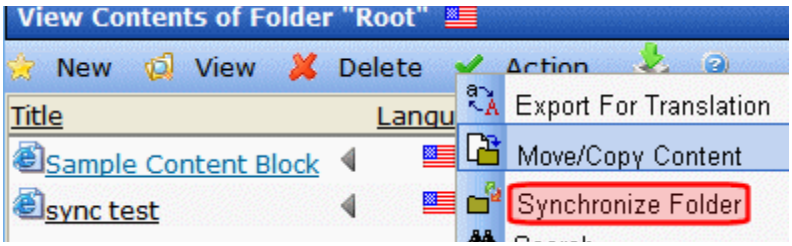
Synching a Folder

The folder sync updates all content in a folder with another computer. It does not affect content in folders underneath the selected folder. *See Also:* "Prerequisites for Content/Folder Sync" on page 1349

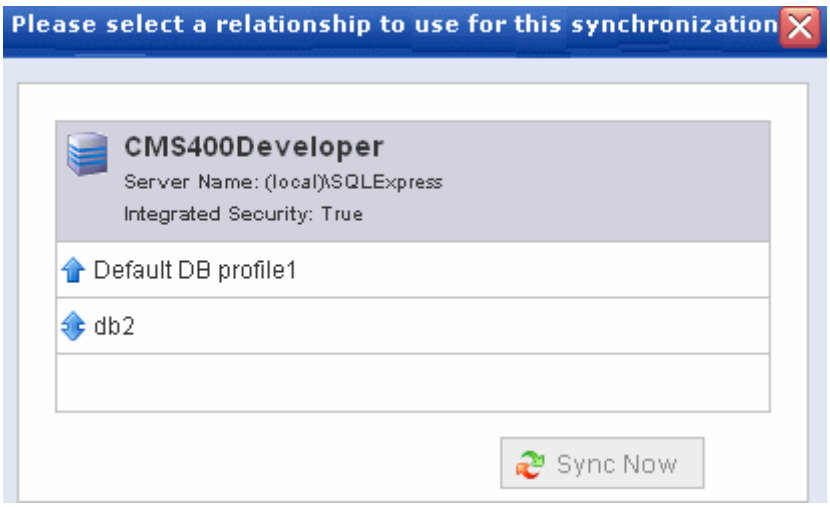
To sync a folder, follow these steps.

1. Navigate to the folder.

2. Click **Action > Synchronize Folder**.



3. A screen asks you to select a sync relationship.



4. Click the **Start Sync** button.
5. All content in the folder is synched with the selected database.

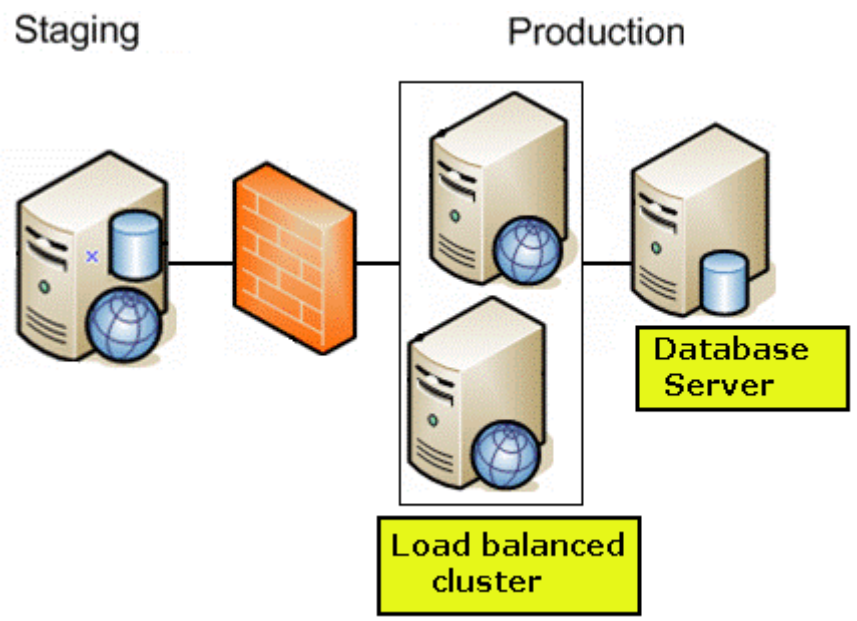
eSync in a Load Balanced Environment

Ektron CMS400.NET supports a load-balanced environment, in which several servers share your Web site's processing load. This feature is explained in "Load Balancing Support" on page 1068.

If your site uses load balancing, you can set up eSync such that, after one server in a load balance cluster is synchronized, the other servers will be automatically synchronized. Note that if a separate database server is outside the load balance cluster (as shown below), eSync only synchronizes documents and files used by the

search among the clustered servers. It does not touch the database.

A typical load balanced cluster is below.



WARNING! Ektron's eSync feature does not synchronize all databases in a SQL database cluster. If you have such a configuration, it is your responsibility to ensure that eSync updates all the databases.

WARNING! In a load balanced environment, only update templates on the staging server. Do not update them on the production server and assume they will be synchronized with the staging server.

Prerequisites

- The connection string on all servers in the cluster match
- You *must* initiate eSync relationships, and the actual synchronization, from a staging server
- If your staging servers are clustered, you must remove one from the cluster before you can sync

Follow these steps to set up this capability.

- "Install a Min Site on Every Server in the Cluster" on page 1357

- ”Update the Assetmanagement.config File” on page 1357
- ”Update the Ektron Windows Service Config File” on page 1357
- ”Create eSync Security Certificates for a Load Balanced Cluster” on page 1359

Install a Min Site on Every Server in the Cluster

1. Upgrade each server to the same 7.6 version of **Ektron CMS400.NET**. If **Ektron CMS400.NET** is already installed to one server, you can install a minimum site on the other servers.

   To do this, run the **Ektron CMS400.NET** base installation file (CMS400Base7x.exe). For more information, see the **Ektron CMS400.NET** Setup manual.
2. If the current site with which you will sync is precompiled, you must also precompile all min sites.

Update the Assetmanagement.config File

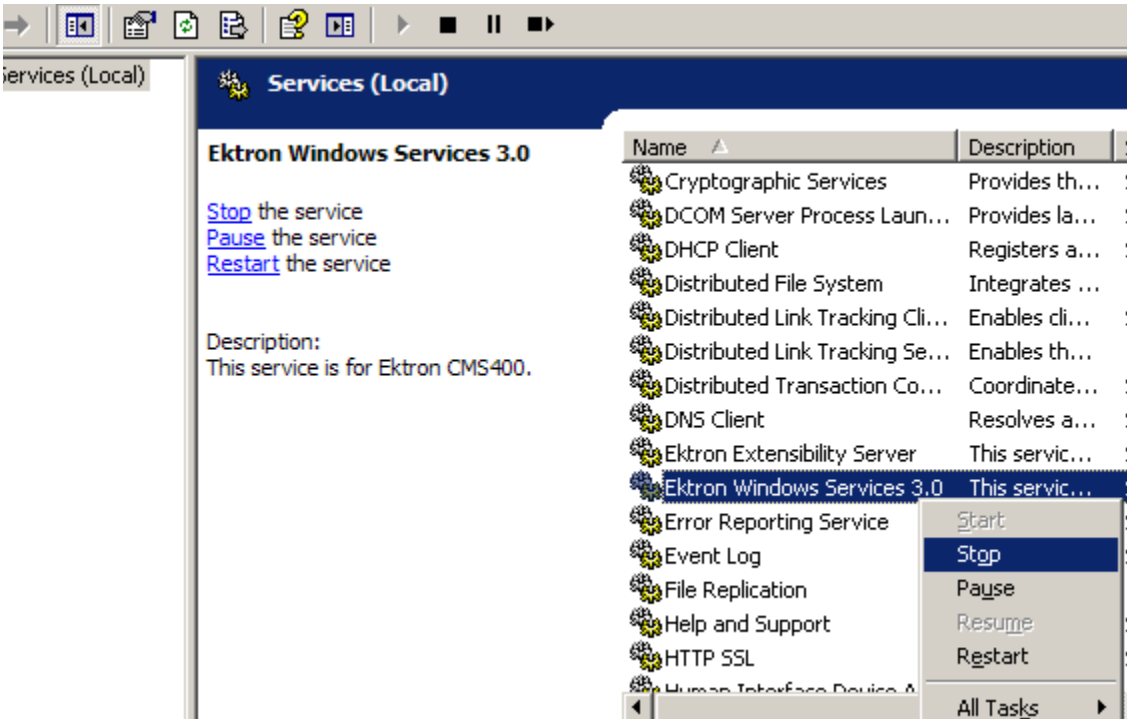
1. Sign on to the first server in your load balanced cluster.
2. In the site root folder, open *site root*`\assetmanagement.config`.
3. Change the value of `LoadBalanced` to **1** and save.
4. Do this on every server in the cluster.

Update the Ektron Windows Service Config File

1. Sign on to the first server in your load balanced cluster.
2. Open `C:\ProgramFiles\Ektron\EktronWindowsService30\Ektron.ASM.EktronServices30.exe.Config`.
3. Change the value of `LoadBalanced` to **1** and save.
4. Do this on every server in the cluster.

```
sion= 1.0 ?>
ration>
<configSections>
        <section name="channelPoolSettings" type="Ektron.FileSync.Framewor
        <section name="loggingConfiguration" type="Ektron.ASM.Logging.Conf
        <section name="EktronDataConfiguration" type="Ektron.ASM.Data.Conf
        <section name="EktronServiceConfiguration" type="Ektron.ASM.Ektron
        <section name="exceptionHandling" type="Ektron.ASM.ExceptionHandli
        <section name="siteDbStrings" type="Ektron.FileSync.Common.DataCon
        <section name="syncSettings" type="Ektron.DbSync.Common.SyncConfig
        <!-- Add ektron.serviceModel section handler -->
        <section name="ektron.serviceModel"
                         type="Ektron.FileSync.Common.Sync.Section, Ektron
        <sectionGroup name="applicationSettings" type="System.Configuratio
                <section name="Ektron.ASM.EktronServices.Properties.Settin
        </sectionGroup>
        <section name="microsoft.web.services3" type="Microsoft.Web.Servic
        <sectionGroup name="userSettings" type="System.Configuration.UserS
                <section name="Ektron.ASM.EktronServices.Properties.Settin
        </sectionGroup>
</configSections>
<appSettings>
        <!-- Sets the time of the day when configuration information is re
        <!-- Config timer as hours:minutes:seconds AM:PM-->
        <add key="updateTime" value="11:59:00 PM"/>
        <add key="HttpServicePort" value="6079"/>
        <add key="PdfGenerator" value="http://pdf.ektron.com/pdfgenerators
        <add key="MetaDataUpdateTime" value="30"/>
        <add key="LoadBalanced" value="0"/>
<add key="LoadBalServerCount" value="2" />
        <add key="GenerateAutoSummary" value="1"/>
        <add key="BestBetsFolder" value="bestbets"/>
        <add key="UsersFolder" value="users"/>
        <add key="UserGroupsFolder" value="communitygroups"/>
 key="ServerCommunicationKey" value=""/>
        <add key="defaultDbSyncClientBinding" value ="wsHttpBinding_ISyncS
```

5. **Stop** and then **Start** the Ektron Windows Service on every server in the cluster.



Create eSync Security Certificates for a Load Balanced Cluster

You should be familiar with eSync security certificates before beginning this procedure. If you are not, read the following section: "Managing eSync Security Certificates" on page 1313.

Assume the load balance cluster has three servers: `mach1`, `mach2`, and `mach3`.

This procedure has two major parts.

- Generating Security Certificates on `mach1`.
- Applying Security Certificates to `mach2` and `mach3`

Generate Security Certificates on mach1

In the first nine steps, you copy `mach1`'s security certificate files, then paste them into the same folder, and rename them beginning with `mach2` and `mach3`.

1. Sign on to `mach1` and generate security certificates. To do this, click the Windows **Start Button> All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
2. The security configurator screen appears.
3. See "Use the following table to complete this screen." on page 1316.
4. Click **Generate Certificates** then click **OK**. This action creates security certificates on `mach1`.
5. On `mach1`, open the following folder: `C:\ProgramFiles\Ektron\CMS400V7x\Utilities\Software\SecurityConfigurator`.
6. Copy the following files.

   •*mach1*_SyncClient.pfx

   •*mach1*_SyncClient.pvk

   •*mach1*_SyncClient.cer

   •*mach1*_SyncServer.pfx

   •*mach1*_SyncServer.pvk

   •*mach1*_SyncServer.cer
7. Paste them into the same folder.
8. Rename each file according to the following pattern: `mach2`_*file name.* (This assumes the second server in your load balance cluster is `mach2`.*)*
9. Repeat steps 7 and 8 for every server in your load balance cluster. So the number of certificate files in the folder is 6 x the number of servers.
10. Copy all security certificate files to the following `mach1` folder: `C:\Program Files\Ektron\EktronWindowsService30`.
11. Stop and start the Ektron Windows Service.

In the second part of this procedure, you

- open the Ektron.ASM.EktronServices30.exe.config file
- copy `mach1`'s certificate's key value
- create new keys, and apply `mach1`'s encoded value to them

So, when you finish, the affected part of the file looks like this:

```
<add key="mach1_SyncClient.cer" encodedValue="MIIB7TCCAVag....
<add key="mach2_SyncClient.cer" encodedValue="MIIB7TCCAVag....
<add key="mach3_SyncClient.cer" encodedValue="MIIB7TCCAVag....
```

NOTE The encodedvalue above is abbreviated to fit the page.

12. Open the following file:

```
C:\Program
Files\Ektron\CMS400v7x\Utilities\EWSUpdates\3.0\Ektron.ASM.EktronServices30.exe.config
```

13. Find the <publickCertKeys> element.
14. Following that line is the encoded certificate value for mach1, which looks something like this.

```
<add key="mach1_SyncClient.cer" encodedValue="MIIB7TCCAVag....
```

NOTE The encodedvalue above is abbreviated to fit the page.

15. Copy the entire <add key> element, including the value, into the Notepad file.
16. Open a text processing application like Notepad.
17. Into the Notepad file, paste the text you copied in Step 13 three times.
18. Change the second line's add key value to mach2_SyncClient.cer.
19. Change the third line's add key value to mach3_SyncClient.cer.
20. Copy the second and third lines of the Notepad file (the lines you just changed).
21. Return to the Ektron.ASM.EktronServices30.exe.config file.
22. Locate the <add key> element.
23. Place the cursor directly below that line.
24. Paste the text you copied in Step 18.
25. Save the Ektron.ASM.EktronServices30.exe.config file.

Apply Security Certificates to mach2 and mach3

1. On the local server, open two Windows Explorer windows: one showing the mach1's file system, and the other showing the mach2's file system.
2. In the mach1 window, open C:\Program Files\Ektron\EktronWindowsService30.
3. Copy all security certificate files in that folder.

4. In the `mach2` window, open the following folder: `C:\Program Files\Ektron\EktronWindowsService30.`
5. Paste all security certificate files you copied in Step 3 to that folder.
6. Stop and start the Ektron Windows Service.
7. In the `mach2` window, create a folder underneath the root folder. Name it **Ektron Security Certificates**.

WARNING! Do not place it under the web root folder, `C:\inetpub\wwwroot.`

8. Return to the `mach1` window, which is still open to the following folder: `C:\Program Files\Ektron\EktronWindowsService30.`
9. Copy the following files.

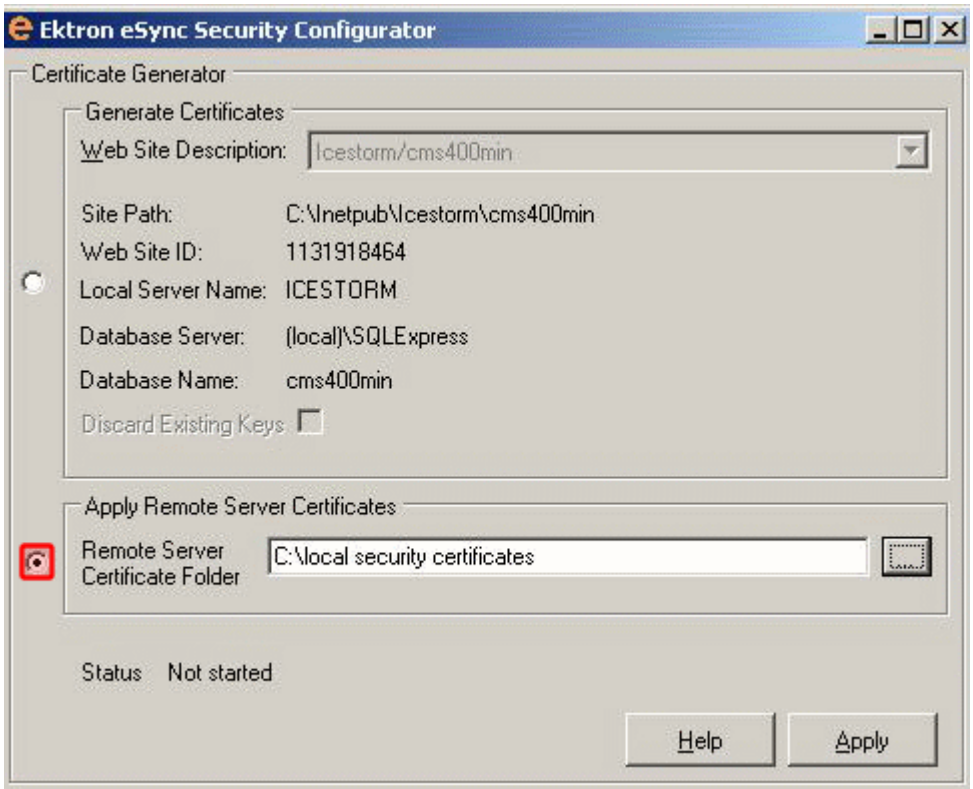
WARNING! Copy - *do not move* - the files from the `mach1` folder.

- *mach2*_SyncClient.pfx
- *mach2*_SyncClient.pvk
- *mach2*_SyncClient.cer
- *mach2*_SyncServer.pfx
- *mach2*_SyncServer.pvk
- *mach2*_SyncServer.cer

10. Paste the files into the `mach2` folder you created in Step 6. Make sure there are no other security files in the folder.

Next, you need to register and move the files to the correct folders. The Security Configurator screen does this.

11. On `mach2`, open the security configurator screen using this path: **Windows Start Button > All programs > Ektron > CMS400 v7x > Utilities > Security Configurator**.
12. The security configurator screen appears.



13. Click the **Apply Remote Server Certificates** button (circled above).
14. Click the browse button next to that field.
15. Browse to the folder to which you pasted the security certificates in Step 9.
16. Click the **OK** button.
17. The utility copies the security certificates you pasted in Step 9 to the correct folder, and configures them for the remote server.
18. Repeat the above steps for every server in the load balance cluster. Note that the files to be copied will start with the server name you're currently setting up.

Setting Up and Running eSync

You set up and run eSync in a load balanced environment the same way you run it normally. See these sections for details.

- "Using eSync to Initialize a New Site" on page 1324
- "Setting up eSync Profiles" on page 1325
- "Optional Steps before Running a Sync" on page 1339
- "Running a Sync" on page 1339

NOTE If your first load balanced sync fails, you must run the Search Config Utility on the load balanced server in order for search to work. *See Also:* "Automatically Recreating a Catalog" on page 396

Using eSync in a Multi-site Environment

If you want to use eSync in a multi-site environment, you *must* do so before the initial synchronization of a configuration. That is, you cannot set up a eSync configuration in a single-site environment and then later change to multi-site. You can set up a new configuration at any time.

See Also:

- "Limitations on using eSync in a Multi-site Environment" on page 1364
- "Setting up eSync in a Multi-Site Environment" on page 1365

Limitations on using eSync in a Multi-site Environment

- In a multi-site environment, you cannot create a staging site from a production site (as described in "Using eSync to Initialize a New Site" on page 1324). You must first create all sites on the staging server, then set up production sites with which they will sync.
- If you want to sync templates between sites in a multi-site configuration, you *must* sign on to the site that has the templates that need to be synched. For example, your configuration consists of a main site and two multi-sites (A & B) on staging and production. If you want to sync site A's templates, you must sign on to site A on the staging server, then use its Workarea screens to sync its templates to site A on the production server.
- When using eSync, each site in a multi-site configuration must be created separately in IIS. In other words, you cannot set up several sites under one IIS site and successfully use eSync.

Setting up eSync in a Multi-Site Environment

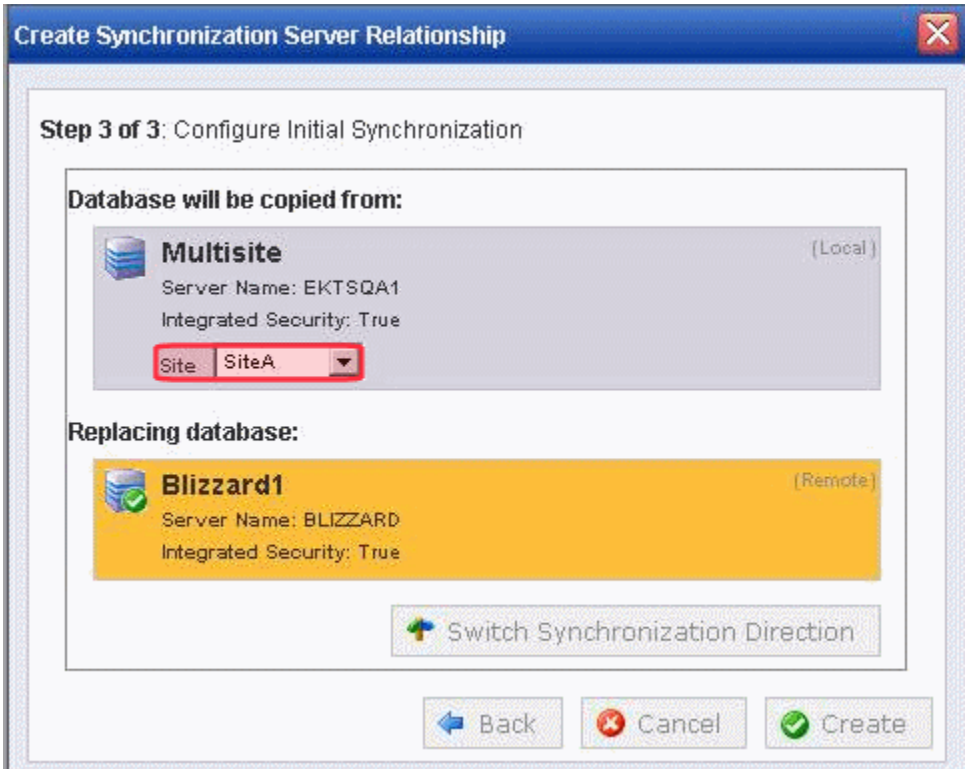
To set up eSync in a multi-site environment, follow these steps.

WARNING! Back up your database before beginning this procedure!

1. Set up all sites on the staging server, following the instructions in the **Ektron CMS400.NET** Administrator Manual section “Multi-Site Support”.
2. Install an **Ektron CMS400.NET** min site on each production server that will host a site. To do this, run the **Ektron CMS400.NET** base installation file, version 7.6 or higher. (For more information, see the **Ektron CMS400.NET** Setup manual.)
3. Install security certificates between the staging server and all production servers. This procedure is described in ”Managing eSync Security Certificates” on page 1313.
4. Sign on to the staging server.
5. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Synchronization**.
6. The View All Synchronization Configurations screen appears.
7. Click the **Add** button ( ).
8. The Create Synchronization Server Relationship screen appears.

NOTE If you see the following error, **The system cannot find the file specified**, you must set up security certificates. *See Also:* ”Managing eSync Security Certificates” on page 1313

Because the staging server is multi-site, the screen’s staging server area has a **Site** pulldown field (circled below), which lets you select a site.



9. Use the following table to complete the screen.

WARNING! The first time you sync an **Ektron CMS400.NET** Web site, all of its data is overwritten. Make sure that no important information resides on the production server before beginning the first sync.

Field	Description
Remote Server	Select a production server by choosing the path to the site's physical location on the remote server.

Field	Description
Port Number	Use this field to indicate to the local service the port on which the remote service runs. By default, port 8732 appears. If you want to change the service port, you must • change it in this field • open the `C:\Program Files\Ektron\EktronWindowsService30\Ektron.ASM.EktronServices30.exe.config` file, and replace every occurrence of `localhost:8732` with `localhost:` followed by the new port number.
Choose Certificate	If you selected a single server above, its name appears here. Proceed to the next step. If you selected a domain or IP address above, click the dropdown arrow to view all servers whose client security certificates reside on this server. Then, select the server with which you want to set up an eSync relationship.

10. Click the **Connect** button.

    After you connect to the production server, all eligible databases on it appear. The top one has a green check mark, indicating it is selected by default.

11. Click the database with which you want to sync. When you do, a green check mark appears on it, and its background color changes.
12. Click **Next**.
13. A new screen appears, showing both servers and allowing you to change the direction of the initial database copy. Make sure you are copying from staging to production.
14. When you are satisfied, click **Create**. This sets up the server configuration but does not launch the initial sync.
15. The View All Synchronization Configurations screen appears with the new configuration.

    If you are ready to overwrite the production database with the staging one, click **Start Initial Sync**.

16. A confirmation screen appears.
17. A screen monitors the sync's progress.
18. The initial sync creates a default profile, which appears on the View All Synchronization Configurations screen.

19. Set up and launch sync profiles to sync workarea files and templates on the staging server with those on the production server. (This is described in "Setting up eSync Profiles" on page 1325 and "Running a Sync" on page 1339.) For synchronization direction, choose **Upload**.

Setting up Staging Multi-sites

By default, if you sign on to a staging server then insert library items (images, quicklinks, etc.) into content, the path to those items includes the production server.

For example, your server setup includes two multi-sites: `sales.ektron.com` and `support.ektron.com`.

NOTE The multi-site names are defined in the site's folder properties screen's **Production Domain** field, as described in"Step 3: Assign Multi-Site Capabilities in Ektron CMS400.NET" on page 1018.

So, any library links in the `sales.ektron.com` site's content look like this: `http://sales.ektron.com/template?id=id number`.

However, you may wish to change library links so they refer to the staging server. This would help you verify that the linked items exist on the staging server.

To change library links so they refer to your staging server, follow these steps.

1. In the **Ektron CMS400.NET** Workarea, go to **Settings > Configuration > Setup**.
2. Click the Edit button ( ).
3. Check the **This is a Staging Server** check box.
4. Save the screen.
5. Go to **Content > the staging site folder**.
6. Click **View > Folder Properties**.
7. Click the Edit button ( ).
8. Scroll down to the section labeled **Multi-Site Domain Configuration:**.
9. In the **Staging Domain** field, enter the URL of your staging server.

10. Save the screen.

From now on, when a user signs on to the staging server and works with library links, the links include the staging server instead of the production server.

Using eSync with Web Alerts

The Web Alert feature enables **Ektron CMS400.NET** to generate email for a list of registered users whenever new content appears on your site, or existing content is updated. For more information, see "Web Alert Feature" on page 1021.

In an eSync environment, you need to determine which servers send Web Alerts. For example, Web Alerts should probably not be generated when content is published on a *staging* server, but you would want them when content is published on a *production* server.

To determine if a server generates Web alerts, use the following property of each Web site's web.config file.

```
<add key="ek_DisableWebAlerts" ..... />
```

Set the property's value to **true** to suppress Web Alerts on a server.

Set the property's value to **false** to generate Web Alerts to on a server.

Also, the server clock on the download side of the eSync relationship must be exactly the same time as or slightly ahead of the clock on the sending server.

eSync and Integrated Search Folders

In a multi-site environment, Integrated Search folders on the source server are not synched with the destination server. *See Also:* "Using the Integrated Search" on page 434; "Setting Up eSync" on page 1263

Using eSync with eCommerce

When using eSync with an eCommerce site, you will want to prevent orders from being processed on your staging server. This is to prevent orders from being processed twice.

For example, a customer on your production site purchases a product. If the staging server and production server are synced before the credit card is processed, the potential exists for the customer's credit card to be charged twice; once from the production server and again from the staging server.

To prevent orders from being processed on your staging server, edit your staging site's web.config file. Next, set the following property to true.

```
<add key="ek_ecom_OrderProcessingDisabled" value="true" />
```

Once the property is set to true, you cannot process or edit orders from the Workarea's View Order screen on the staging server. Also, if you try to create an order from the staging server's Web site, you receive the following message.

> "***We're sorry, an error occurred while processing your request. Please try again later...***"

It is important to note that all other eSync functions still work properly. For example, when you create catalog entries on a staging server and perform a sync, the entries will be moved to the production server. This key only affects the processing of orders.

eSync Troubleshooting

Symptom	Cause	Possible Solutions
Synchronization has failed There was no endpoint listening at http://alphatest:8732/Ektron.Sync.Communication/SyncCommunicationScheduleService.svc that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.	One server in the configuration cannot resolve the address of the other server. This may be due to security restrictions or because the Ektron Windows service is off.	• Modify the hostname of the other server so that it can be found. • Restart the Windows service • Reconfigure security
The identity check failed for the outgoing message. The expected identity is *xxx* for the *xxx* target endpoint.	Local site can't communicate with service	1. Load the security configuration utility: `C:\Program Files\Ektron\CMS400V7x\utilities\software\securityconfigurator\securityconfigurator.exe`. 2. Select the web site that is failing. 3. Click **OK**. This recopies client certificates to the site and updates web.config to use them.
No viable CMS sites were found on the remote server specified. Please check the remote server and try again.	No **Ektron CMS400.NET** site exists on the remote server.	Install an **Ektron CMS400.NET** min site on the remote server.

Appendix A: Unicode Support

Ektron CMS400.NET supports Unicode characters in

- the editor

  - source view, from the editor
- dialog boxes

Unicode Support in the Ektron CMS400.NET Editor

Ektron CMS400.NET is practically 100% compliant with the Unicode standard. It is only lacking in the following areas.

- **Dialog box title bars** - If the client does not support Unicode characters, the title bar displays English.
- **The toolbar** - If the client does not support Unicode characters, drop-down lists on the toolbar display question marks (?).

NOTE A client fully supports Unicode characters if the Unicode language is the same as the Windows default language.

- **Toolbar dropdown lists on Korean systems** - Korean characters in a drop-down list may appear as question marks (?) unless one of the following conditions is true:

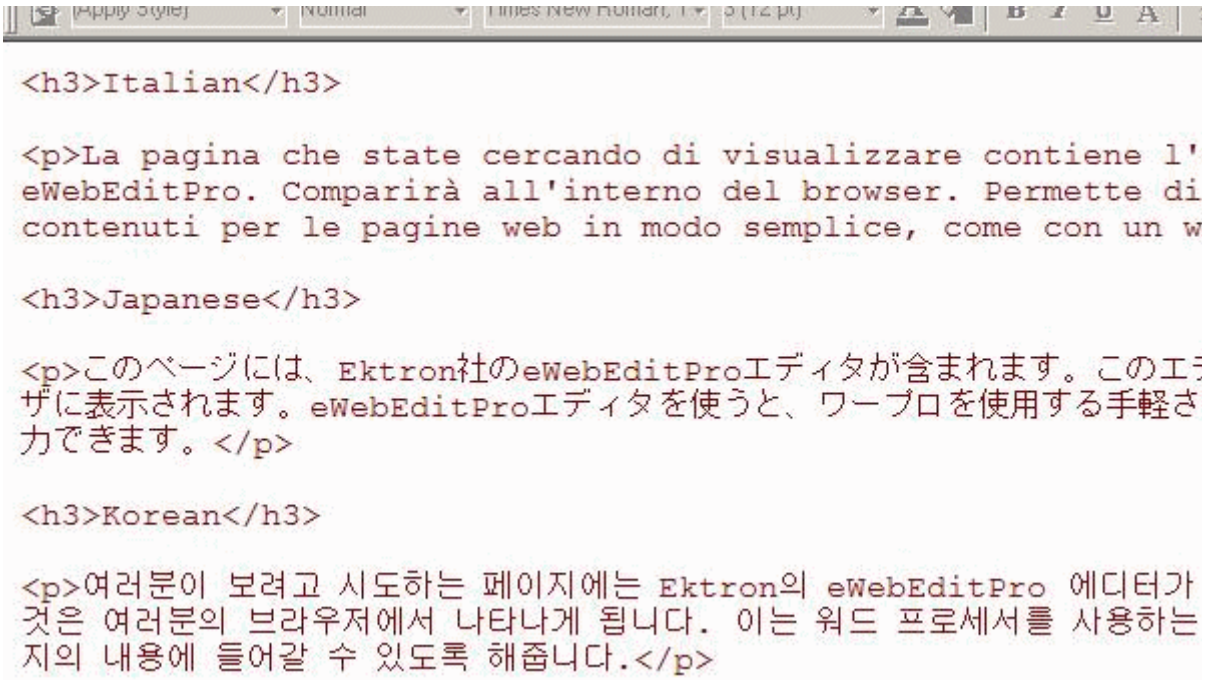
  - The Arial Unicode MS font is installed. Since this is installed with MS Office, most clients have it.

    or

  - The default system language is Korean.

Unicode Support in Source View

Ektron CMS400.NET also supports Unicode characters in while viewing HTML source code, as illustrated below.



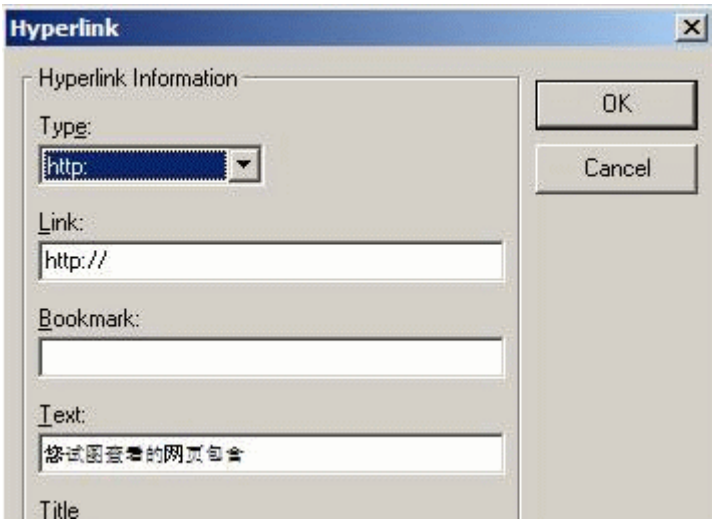
```
<h3>Italian</h3>

<p>La pagina che state cercando di visualizzare contiene l'
eWebEditPro. Comparirà all'interno del browser. Permette di
contenuti per le pagine web in modo semplice, come con un w

<h3>Japanese</h3>

<p>このページには、Ektron社のeWebEditProエディタが含まれます。このエ
ザに表示されます。eWebEditProエディタを使うと、ワープロを使用する手軽さ
力できます。</p>

<h3>Korean</h3>

<p>여러분이 보려고 시도하는 페이지에는 Ektron의 eWebEditPro 에디터가
것은 여러분의 브라우저에서 나타나게 됩니다. 이는 워드 프로세서를 사용하는
지의 내용에 들어갈 수 있도록 해줍니다.</p>
```

For more information about working with HTML source code, see the Ektron CMS400.NET User Manual chapter “Working with HTML.”

Unicode Support in Dialog Boxes

Ektron CMS400.NET supports Unicode in text boxes within dialogs even if the Operating System (OS) language does not match the Unicode language. For example, a content contributor author wants to edit in Korean and Japanese without switching the OS language.

Here is an example of such a dialog.


Hyperlink
Hyperlink Information
Type:
http:
Link:
http://
Bookmark:
Text:
您试图查看的网页包含
Title
OK
Cancel

What's New in the 7.6 Release

The following new 7.6 features are documented in the **Ektron CMS400.NET** Administrators Manual.

- The Community Platform's Tags feature now includes content and library items. See "Tags" on page 989
- The URL Aliasing feature has been totally revamped and improved. See "URL Aliasing" on page 567.
  - **7.6.1**- Aliasing now supports rules to handle an alias's query string parameters. Also, you can now control which folders/ taxonomy levels appear in the automatic alias pattern.
- A new eSync feature automates the process of copying a web site from a staging server to a production server. See "eSync" on page 1025.
- The license keys have been restructured to accommodate **Ektron CMS400.NET**'s new price structure. See "License Keys" on page 6.
- eWebEdit400's spell checking now supports multiple languages. See "Setting the Spell Check Language for eWebEdit400" on page 915.
- Users can now add video to a forum post. See "Adding Video to a Post" on page 533
- A new Widgets feature has been added to the Workarea and the eIntranet site. It allows users to add custom mini-applications to personalize their page. See "" on page 702
- **7.6.1** - Membership users can moderate Discussion Boards. See "Discussion Board Permissions" on page 517
- **7.6.1** - Users with Moderate permission for Discussion Boards can delete topics from the Web site. See "Moderate" on page 518
- **7.6.1** - Users can delete their own topic in a Discussion Board from the Web site. See "Deleting a Topic" on page 528

- **7.6.1** - A beta version of the eCommerce feature was added. See "eCommerce" on page 1086
- **7.6.1** - The buttons and methodology used to validate eWebEdit400 content have changed. See "Validating with eWebEdit400" on page 113
- **7.6.5** - You can lock a specific Topic in a Discussion Board. See "Locking a Topic" on page 494.
- **7.6.5** - A completed version of the eCommerce feature was released. See "eCommerce" on page 1086.
- **7.6.5** - The screen used to create and maintain eCommerce coupons were improved. See "eCommerce Coupons" on page 1244.
- **7.6.5** - Much improved multi-language support was added to the Taxonomy feature. See "Multi-Language Support for Taxonomies" on page 687
- **7.6.6** - Support for checks and PayPal was added to eCommerce. See "PayPal Support" on page 1113 and "Check Support" on page 1129
- **7.6.6** - The Setting up eSync chapter has a new section. See "Scenario 1: Synching Two Sites on the Same Server" on page 1263.
- **7.6.6** - Logs have been added to eSync to provide a record of all syncs. For each sync, you can view the user ID, and the number of applied, skipped, and total changes. See "Sync Logs" on page 1344.
- **7.6.6 SP1** - You can change library links so they refer to the staging server, as opposed ti the production server. This would help you verify that the linked items exist on the staging server. See "Setting up Staging Multi-sites" on page 1368

Additional Information

Supporting Documents

You can find more detailed information about Ektron CMS400.NET in the following manuals:

- Ektron CMS400.NET Developer's Reference Manual
- Ektron CMS400.NET User Manual
- Ektron CMS400.NET Setup Manual

Support

If you are experiencing trouble with any aspect of Ektron CMS400.NET, please contact the Ektron Support Team via our Web Site: http://dev.ektron.com/support.aspx.

Sales

For questions and answers about purchasing Ektron CMS400.NET from Ektron, contact the sales department at sales@ektron.com.

Information

For general information about Ektron and its products, send an email to info@ektron.com.

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